

AGREEMENT FOR THE PURCHASE OF GOODS AND SERVICES

THIS AGREEMENT FOR THE PURCHASE OF GOODS AND SERVICES ("Agreement") is made _____, 2018 between Univar USA, Inc. ("Contractor"), whose address is 8201 S 212th Street, and telephone number is 253-872-5000 and the City of Stockton, a municipal corporation ("City").

In consideration of the mutual promises set forth in this Agreement, the parties agree as follows:

1. Goods to be provided and services to be performed. Contractor shall provide the goods and perform the services as set forth in the Request for Bid documents and on the attached Exhibit A incorporated herein by reference. Contractor shall begin providing the goods/performing the services on July 1, 2018 and complete providing the goods/performing the services by June 30, 2019. The parties may agree to extend the contract on a year-to-year basis, not to exceed three (3) yearly renewals. The price for any succeeding period of service shall be agreed upon by both parties.
2. Compensation. For the goods and services under this Agreement, City shall pay Contractor the sum of \$0.3570 per dry pound for delivery of 25% Sodium Hydroxide, and \$0.3222 per dry pound for 50% Sodium Hydroxide. The not-to exceed amount for the potential 4-year contract term is \$294,936.
3. Method of Payment. City shall pay Contractor within 30 days from the date Contractor's invoices are approved by the City Manager. Contractor shall submit monthly invoices.
4. Maintenance. Contractor shall maintain the goods as set forth in Exhibit A at a cost as set forth in Exhibit A. Contractor shall respond to calls for required maintenance from City personnel within 24 hours of the call; required maintenance occurs when the self check system fails to perform any of its functions. If Contractor is unable to resolve routine maintenance issues by phone within 48 hours, Contractor shall provide to City personnel a resolution report indicating how and when the Contractor intends to resolve the issue. Within the period of the maintenance agreement, Contractor shall implement all software and firmware upgrades to the goods identified in Exhibit A at no cost to City. If software and firmware upgrades require a hardware upgrade, Contractor shall provide the upgraded hardware at no cost to the City. City personnel shall review and approve any upgrades prior to their installation.
5. Warranty. Contractor warrants that for one year the goods installed shall be free of defects in materials and workmanship. The one year period shall begin upon the date the City provides in writing to Contractor acceptance of the goods. The warranty under this section shall provide coverage equal to or greater than those warranties that are customary in the industry and, at a minimum, include all parts and labor.

6. Hold Harmless. To the fullest extent permitted by law, Contractor shall hold harmless, defend at its own expense, and indemnify the City of Stockton, its Mayor, Council, officers, representatives, agents, employees and volunteers, against any and all liability, claims, losses, damages, or expenses, including reasonable attorney's fees, arising from all acts or omissions to act of contractor or its officers, agents, or employees in rendering services under this contract; excluding, however, such liability, claims, losses, damages, or expenses arising from the City of Stockton's sole negligence or willful acts. The duty to defend and the duty to indemnify are separate and distinct obligations. The indemnification obligations of this section shall survive the termination of this agreement.

7. Insurance. During the term of this Agreement, Contractor shall maintain in full force and effect at its own cost and expense the insurance coverage set forth on the attached Exhibit B and shall otherwise comply with the provisions of Exhibit B.

8. Business License. Prior to its execution of this Agreement, Contractor shall obtain a City business license.

9. Audit. City reserves the right to periodically audit all charges for good and services provided by Contractor.

10. Ownership of Goods. All goods accepted by the City shall be the property of the City.

11. Changes to the Agreement. This Agreement may not be modified except in writing by both parties.

12. Applicable Law. This Agreement shall be governed by the laws of the State of California and venue for any action brought in state court shall be in the Superior Court, County of San Joaquin, Stockton Branch or, for actions brought in federal court, the United States District Court for the Eastern District of California, Sacramento Division.

13. Non-Assignability. Contractor shall not assign or transfer this Agreement or any interest or obligation in this Agreement without the prior written consent of the City and then only upon such terms and conditions as City may set forth in writing.

14. Notices. All notices herein required shall be in writing and shall be sent certified or registered mail, postage prepaid, addressed as follows:

To Contractor: Jennifer Perras
Univar USA, Inc
8201 S 212th
Kent, WA 98032-1994

To City: City Manager
 City of Stockton
 425 N. El Dorado St.
 Stockton, CA 95202

15. Conformance to Applicable Laws. Contractor shall comply with all applicable Federal, State and Municipal laws, rules and ordinances. Contractor shall not

discriminate in the employment of persons or in providing services under this Agreement on the basis of any legally protected classification including race, color, national origin, sex or religion of such person.

16. Miscellaneous Provisions.

a. City may terminate this Agreement at any time by mailing notice to Contractor at the address first stated above. Contractor shall be paid for that portion of goods provided / services provided when notice is received.

b. Contractor shall not assign or transfer this Agreement.

c. In the performance of this Agreement, Contractor, its employees and agents shall have the status of an independent contractor and not as an employee of the City for any purpose.

d. If either City or Contractor waives a breach of this Agreement, such waiver shall not constitute a waiver of other or succeeding breaches of this Agreement.

e. This Agreement constitutes the entire understanding of the parties.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement the date and year first above written.

CITY OF STOCKTON

CONTRACTOR

KURT O. WILSON
CITY MANAGER

By:

Sherry Mitty
Signature

Sherry Mitty
Print name

Municipal Commercial Manager
Title

[If Contractor is a corporation, signatures must comply with Corporations Code §313]

ATTEST:

APPROVED AS TO FORM

BRET HUNTER, CMC
CITY CLERK

CITY ATTORNEY

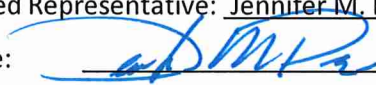
EXHIBIT A

**BAY AREA CHEMICAL CONSORTIUM
STANDARD AGREEMENT, PAGE 1 OF 2
BID NO. 12-2018
SUPPLY AND DELIVERY OF SODIUM HYDROXIDE**

Bay Area Chemical Consortium (BACC)
c/o Dublin San Ramon Services District
Regional Wastewater Treatment Facility
7399 Johnson Drive
Pleasanton, CA 94588

Dear Sirs:

I hereby agree to furnish Sodium Hydroxide identified in the attached bid forms, as solicited by the Bay Area Chemical Consortium (BACC), to one or more of the participating BACC Agencies.

Company: Univar USA Inc.
Address: 8201 S 212th St.
City, State, ZIP: Kent, WA 98032
Phone: 253-872-5000
Email: muniteam-west@univar.com
Authorized Representative: Jennifer M. Perras
Signature: 
Date: April 6, 2018

WE ACKNOWLEDGE RECEIVING ADDENDUM/ADDENDA NUMBER 1 THROUGH 2.

SPECIFIC DEVIATIONS (if applicable, attach additional sheets if necessary):

*** Unless specified in the BACC bid documents as not accepting deviations from the stated regional pricing on pages 72-73, all "shot loads" of less than 2,000 gals. will be priced at the stated regional pricing plus a \$290.00 LTL charge.

***See attached 2 pages for the list of spec. deviation from the Caustic soda specifications listed on pages 17-28.

Univar
12522 Los Nietos Rd
Santa Fe Springs, CA 90670
USA



www.univar.com

Memorandum

Date March 30, 2018
From Tom Edman, Sr. Product Manager, Caustic Soda
Re BACC Bid No. 12-2018: Deviation from BACC NaOH Specifications

In accordance with Bid No. 12-2018, Section 2.12, Proposed Deviations from the Specifications by the Bidder, Univar intends to supply sodium hydroxide solution to BACC meeting the following technical specifications:

UNIVAR PRODUCT TECHNICAL SPECIFICATIONS SODIUM HYDROXIDE, 50% Solution

Characteristics	Units	Minimum	Maximum
Sodium Hydroxide, NaOH	Wt %	48	52
Sodium Oxide, Na ₂ O	Wt %	37.7	40.4
Sodium Chloride, NaCl	PPM	0	100.00
Sodium Carbonate, Na ₂ CO ₃	Wt %	0	0.30
Sodium Chlorate, NaClO ₃	PPM	0	50
Sodium Sulfate, Na ₂ SO ₄	PPM	0	100
Nickel, Ni	PPM	0	0.5 *
Iron, Fe	PPM	0	5 *
Mercury, Hg	PPM	0	2
Specific Gravity		1.45	1.60

* Sodium hydroxide for wastewater treatment applications may contain up to 9 ppm iron (Fe) and 3 ppm nickel (Ni)

UNIVAR PRODUCT TECHNICAL SPECIFICATIONS SODIUM HYDROXIDE, 30% Solution

Characteristics	Units	Minimum	Maximum
Sodium Hydroxide, NaOH	Wt %	29	32
Sodium Oxide, Na ₂ O	Wt %	22.5	23.7
Sodium Chloride, NaCl	PPM	0	100
Sodium Carbonate, Na ₂ CO ₃	Wt %	0	0.15
Sodium Chlorate, NaClO ₃	PPM	0	31
Sodium Sulfate, Na ₂ SO ₄	PPM	0	80
Nickel, Ni	PPM	0	0.5 *
Iron, Fe	PPM	0	5 *
Mercury, Hg	PPM	0	2
Specific Gravity		1.25	1.40

* Sodium hydroxide for wastewater treatment applications may contain up to 9 ppm iron (Fe) and 3 ppm nickel (Ni)

**UNIVAR PRODUCT TECHNICAL SPECIFICATIONS
SODIUM HYDROXIDE, 25% Solution**

Characteristics	Units	Minimum	Maximum
Sodium Hydroxide, NaOH	Wt %	23	27
Sodium Oxide, Na ₂ O	Wt %	15.5	20.2
Sodium Chloride, NaCl	PPM	0	100
Sodium Carbonate, Na ₂ CO ₃	Wt %	0	0.15
Sodium Chlorate, NaClO ₃	PPM	0	26
Sodium Sulfate, Na ₂ SO ₄	PPM	0	80
Nickel, Ni	PPM	0	0.5 *
Iron, Fe	PPM	0	5 *
Mercury, Hg	PPM	0	2
Specific Gravity		1.20	1.35

* Sodium hydroxide for wastewater treatment applications may contain up to 9 ppm iron (Fe) and 3 ppm nickel (Ni)

**UNIVAR PRODUCT TECHNICAL SPECIFICATIONS
SODIUM HYDROXIDE, 20% Solution**

Characteristics	Units	Minimum	Maximum
Sodium Hydroxide, NaOH	Wt %	19	21
Sodium Oxide, Na ₂ O	Wt %	14.37	16.28
Sodium Chloride, NaCl	PPM	0	100
Sodium Carbonate, Na ₂ CO ₃	Wt %	0	0.15
Sodium Chlorate, NaClO ₃	PPM	0	20
Sodium Sulfate, Na ₂ SO ₄	PPM	0	80
Nickel, Ni	PPM	0	0.5 *
Iron, Fe	PPM	0	5 *
Mercury, Hg	PPM	0	2
Specific Gravity		1.2124	1.2344

* Sodium hydroxide for wastewater treatment applications may contain up to 9 ppm iron (Fe) and 3 ppm nickel (Ni)

STANDARD AGREEMENT, PAGE 2 OF 2

BIDDER INFORMATION

1. Legal Name of Bidder:
Univar USA Inc.

2. Bidder's Street Address:
8201 S 212th St., Kent, WA 98032

3. Mailing Address:
same as above

4. Business Telephone: 253-872-5000 Fax Number: 253-872-5041
5. Type of Supplier:
☐ Sole Proprietor ☐ Partnership ☒ Corporation
 If Corporation, indicate State where incorporated: _____
6. Business License Number issued by the City where the Supplier's principal place of business is located.
 Number: 3641101210 Issuing City: San Jose, CA
7. Supplier Federal Tax Identification Number: 91-1347935
8. Emergency Contact: Name: Tom Mendenhall
 Phone Number: 650-280-3726
9. Order Contact: Name: Sonja Hammock
 Address: 50 S. 45th Ave, Phoenix, AZ 85043
 Phone Number: 800-659-5908 Fax Number: 602-278-9138
 Email: muniteam-west@univar.com
10. References:

<u>Company/Agency Name</u>	<u>Contact Name</u>	<u>Phone Number</u>
1) <u>see attached 2 pages</u>	_____	_____
2) _____	_____	_____
3) _____	_____	_____
11. Chemical Manufacturer's name and address (if different from Bidder):
 K2 Pure Solutions-950 Loveridge Rd., Pittsburg, CA 94565

 Dow Chemical-901 Loveridge Rd., Pittsburg, CA 94565

Univar USA Inc.
8201 S. 212th
Kent, WA 98032-1994
USA

T 253-872-5000
F 253-572-5041
www.univarusa.com



Referneces

1. County & County of San Francisco
1 Dr. Carlton B Goodlett Place
San Francisco, CA 94102

Contact: Carolyn Sladnick, Senior Purchaser
Phone: 415-554-3266; Fax: 415-487-7737

Supply and Delivery of Bulk Sodium Hypochlorite, Caustic Soda and Sodium Bisulfite

2. City of Pflugerville
PO Box 589
Pflugerville, TX 78691

Contact: Wiley Webb, Superintendent
Phone: 512-990-6400

Supply and Delivery of Bulk Sodium Hypochlorite

3. East Bay Mud
PO Box
Oakland, CA 946231

Contact: Kelley Smith, Purchasing Supervisor
Phone: 510-287-0355
Supply and Delivery of Bulk Sodium Hypochlorite, Bulk Caustic Soda

4. City of Riverside
WTP
San Bernardino, CA 92408

Contact: Shiloh Rogers, Procurement & Contract Specialist
Phone 951-826-5562
Supply and Delivery of Sodium Hypochlorite

[addressee]
[date]
[page #]

5. BACC-Bay Area Chemical Consortium
Over 100 locations within Northern California

Contact: Louanne Ivy-Administrative Analyst
Phone: 925-875-2398
Supply and Delivery of Sodium Hypochlorite

6. City of Los Angeles
Los Angeles, CA

Contact: Katherin Quinn-Procurement Supervisor
Phone: 310-648-5665
Supply and Delivery of Sodium Hypochlorite

Over the past 5 years, Univar has participated in 100's of Municipal bids, we have listed the 6 projects represent our capabilities in California.

All of our operational personnel participated in making sure all delivery requirements were met to each customer.

Our customer service department takes care of all orders, they communicate with operations and the customer to make sure all requests are satisfied.

We meet 100% of our contractual obligations; any municipality that is under contract with Univar is serviced first if there is a shortage in the market place.

**Non-Collusion Affidavit
To Be Executed By Bidder and Submitted With Bid**

State of Washington)
) ss.
County of King)

Jennifer M. Perera, being first duly sworn, deposes and says that he or she is
(Contractor's Authorized Representative)

Municipal Specialist of Univac USA Inc. the party making the
(Title of Representative) (Contractor's Name)

Foregoing bid that the bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that the bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or that anyone shall refrain from bidding; that the bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bid, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the bid are true; and, further, that the bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

I declare under penalty of perjury under the laws of the state of California that the foregoing is true and correct.

[Signature]

Signature of: President, Secretary,
Manager, Owner, or Representative

Subscribed and sworn to before me this, 16th day of April, 20 18

Raise Halden
Signature of Notary Public In and for

The County of King,

State of Washington



All Signatures Must Be Witnessed By Notary

**BAY AREA CHEMICAL CONSORTIUM
BID FORM FOR BID NO. 12-2018**

Sealed bids must be enclosed in an envelope clearly marked:

**"BID FOR SODIUM HYDROXIDE
BACC BID NO. 12-2018"**

And delivered to:

Gemma Lathi
Administrative Analyst – Operations
Dublin San Ramon Services District
Regional Wastewater Treatment Facility
7399 Johnson Drive
Pleasanton, CA 94588

No later than 9:00 A.M. PDT
Tuesday, April 10, 2018

Business Name:
Univar USA Inc.

Business Address
8201 S 212th St.

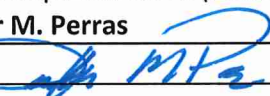
**Attn: Muni Team
Kent, WA 98032**

Telephone Number: 253-872-5000

Facsimile Number: 253-872-5041

Email Address: munteam-west@univar.com

Authorized Representative (Please Print):
Jennifer M. Perras

Signature: 

Date: April 6, 2018

- I.** **All costs except California State sales tax for the purchase of Sodium Hydroxide must be included in the amount shown below on this Bid Form, including any and all mill assessments, fees, excise taxes, transportation charges, etc. Any exceptions to the bid must be noted under Specific Deviations on the Standard Agreement. Bidders shall submit bids per unit of measure as specified in attached Exhibit A to Bid Form.**

- II.** **Bidders must submit all of the following, attached to this Bid Form:**
 - a. An affidavit of compliance to the appropriate American Water Works Association (AWWA) and/or National Sanitation Foundation (NSF) standard is required for all chemicals and polymers being provided for potable water treatment. Bidders must include a statement by the chemical manufacturer, signed by an authorized representative on letterhead stationery, attesting to the affidavit's validity. In lieu of submitting an affidavit of compliance with AWWA/NSF standards and a letter attesting to the affidavit's validity, a current printout from NSF.org is acceptable.
 - b. A representative analysis of the chemical to be supplied, as prepared by a reputable outside laboratory or bidder's in-house laboratory if ISO certified.
 - c. Product Bulletin and Typical Properties.
 - d. Safety Data Sheet (SDS).
 - e. If applicable, the name, address, and contact information for the third party hauling company as well as an affidavit signed by the Bidder that the third party hauler can and will deliver the chemical to each and every participating BACC Agency.

**BAY AREA CHEMICAL CONSORTIUM
EXHIBIT A TO BID FORM
BID NO. 12-2018
SODIUM HYDROXIDE**

UNIVAR

Bidders shall submit bids in US\$ per unit of measure as indicated below, FOB Destination.

Bid prices must be based on bulk deliveries of 2,000 gallons or 1 ton or more.

Refer to paragraph 2.4 Bid Pricing for full details.

	Unit of Measure	Bid Price per Unit of Measure	
Sodium Hydroxide 20% (Caustic)			
<u>Sacramento</u>	dry lb	\$.3724	✓
City of Sacramento			
Sodium Hydroxide 25% (Caustic)			
<u>Central Valley</u>	dry lb	\$.3570	✓
City of Stockton			
<u>Marin Sonoma Napa</u>	dry lb	\$.3587	✓
Marin Municipal Water District			
Napa Sanitation District			
<u>Sacramento</u>	dry lb	\$.3574	✓
Carmichael Water District			
City of Roseville			
City of Yuba City			
Nevada Irrigation District			
Sacramento County Water Agency			
Woodland-Davis Clean Water Agency			
<u>South Bay</u>	dry lb	\$.3668	✓
City of Sunnyvale - Water Pollution Control Plant			
<u>Tri Valley</u>	dry lb	\$.3610	✓
Zone 7 Water Agency			
Sodium Hydroxide 30% (Caustic)			
<u>North Bay</u>	dry lb	\$.3445	✓
Contra Costa Water District			
<u>Sacramento</u>	dry lb	\$.3582	✓
Rancho Murieta Community Services District			
Sodium Hydroxide 50% (Caustic)			
<u>Central Valley</u>	dry lb	\$.3222	✓
City of Stockton			

**BAY AREA CHEMICAL CONSORTIUM
EXHIBIT A TO BID FORM
BID NO. 12-2018
SODIUM HYDROXIDE**

CLINAR

Bidders shall submit bids in US\$ per unit of measure as indicated below, FOB Destination.

Bid prices must be based on bulk deliveries of 2,000 gallons or 1 ton or more.

Refer to paragraph 2.4 Bid Pricing for full details.

	Unit of Measure	Bid Price per Unit of Measure	
<u>East Bay</u>	dry lb	\$.3253	✓
Alameda County Water District			
<u>Marin Sonoma Napa</u>	dry lb	\$.3270	✓
Marin Municipal Water District			
North Marin Water District			
<u>North Bay</u>	dry lb	\$.3169	✓
City of Antioch			
City of Martinez			
City of Pittsburg			
<u>Sacramento</u>	dry lb	\$.3302	✓
Carmichael Water District			
City of Roseville			
<u>South Bay</u>	dry lb	\$.3261	✓
Santa Clara Valley Water District			
<u>Tri Valley</u>	dry lb	\$.3241	✓
Zone 7 Water Agency			

Univar USA Inc.
8201 S. 212th
Kent, WA 98032-1994
USA

T 253-872-5000
F 253-572-5041
www.univarusa.com



April 6, 2018

Dublin San Ramon Services District
Regional Wastewater Treatment Facility
Attn: Gemma Lathi
7399 Johnson Dr
Pleasanton, CA 94588

RE: Bid for Sodium Hydroxide, BACC Bid No. 12-2018

To Gemma:

Univar USA Inc. is pleased to offer a price quote on your ITB due Tuesday, April 10, 2018 and has done so on the attached required paperwork.

Our contact information for all things bid and contract related, as well as the information for your local branch, is also attached.

We look forward to hearing the results of your request – we have included a self-addressed, stamped envelope for the bid tabulations.

Thank you,

Jennifer Perras

Municipal Specialist
Western Region
Univar USA Inc.
Muniteam-west@univar.com
www.univar.com

Please Note: Seller shall indemnify Buyer for losses to the extent caused by Seller's negligence or breach of contract. Neither party is liable for incidental or consequential damages. Seller's liability is limited to the purchase price of the goods. SELLER MAKES NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.

Please Note: Where applicable, any State, Federal or other appropriate taxes and/or the California Mill Assessment will appear as separate line items on any invoices from Univar. If Univar's offer (pricing) was inclusive of these charges – they will be backed out of the "product" line item and shown as their own line item(s) at the time of billing.

Please Note: Cooperative Purchasing/Contract Piggy-Back Clauses: Unless otherwise checked "yes" within the attached offer, it is Univar's standard policy NOT to agree to/participate in Cooperative Purchasing but rather to work with each individual agency and reach a pricing agreement that is based on their needs and is advantageous for both parties. Unless otherwise noted within the attached offer – pricing within is only applicable for the locations (and any potential locations) listed within these bid documents.



**UNIVAR USA INC.
AUTHORIZED BID SIGNERS**

RESOLUTION

RESOLVED, that the Corporate Secretary shall maintain a list of the agents of this Corporation who are vested with authority to execute in the Corporation's behalf formal, written bids or proposals for the sale or other disposition of products handled by the Corporation. Said list shall be as established initially by the Board of Directors and thereafter, the President, or a Vice President shall have the authority, by written directive to the Corporate Secretary, to add agents to or eliminate agents from said list, and it is further

RESOLVED, that the Corporate Secretary or any Assistant Secretary of the Corporation is authorized to certify this resolution or certify to the name or names of persons on the list maintained by the Corporate Secretary and such certificate will be conclusive evidence of the authority of such person or persons so to act.

END OF RESOLUTION

CERTIFICATION

I, the undersigned, as Corporate Secretary of Univar USA Inc. do hereby certify as follows:

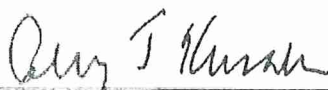
1. That the above resolution was duly adopted by the Board of Directors of said Corporation at a meeting duly held on December 4, 1986, and is in full force and effect.
2. That the list of persons authorized to execute, for an on behalf of this Corporation, written bids or proposals for the sale or other disposition of products handled by this Corporation, as initially established by the Board of Directors and thereafter added to by the President, or a Vice President of this Corporation as follows:

All officers and the following:

Shawnasey McCarthy – Municipal Commercial Manager
 Victoria Meakim – Municipal Specialist
 Linda Campbell – Municipal Specialist
 Sara Cauthen – Municipal Specialist
 Roise Holiday – Municipal Specialist
 Michele Karras – Municipal Specialist
 Jennifer Perras – Municipal Specialist
 Shelley Stevens – Municipal Specialist
 Michael Crea – Municipal Specialist
 Cameron Howl – Municipal Specialist

3. That the foregoing person is authorized to execute bids pursuant to the resolution above referred to.

Dated this 6th of April, 2018.



 Perry T. Kusakabe
 Corporate Secretary



Univar USA Inc.
2256 Junction Ave.
San Jose, CA 95131-1216

T 408-435-8700
F 408-435-1735
800-659-5908
www.univar.com



GENERAL INFORMATION

Regular Office Hours during which orders may be placed:

Monday – Friday 7:00 am – 5:00 pm (PST)

In case of an emergency during non-business hours:

For Non-Chemical Emergencies:

After-hours emergency – 24-hour response:

Nina Williamson -	(650) 241-5719 (cell)
Tom Mendenhall-	(650) 216-8821 (cell)
Brian Wills-	(650) 670-7267 (cell)

For Chemical Related Emergencies:

ChemTrec: (800) 424-9300

Names, telephone/FAX numbers of those responsible for taking orders and initiating delivery:

Office Phone: (800) 659-5908
Office Fax: (408) 435-1735

Sonja Hammock - Customer Service
John Dinh -Dispatcher for packaged goods

Custsvc-sanjose@univarusa.com
John.dinh@univar.com

For anything pertaining to bids:

Please send all bid packets/documents to:
(Unless otherwise specified)

Univar USA Inc.
Attn: WER Muni Team
8201 S. 212th
Kent, WA 98032-1994

Contacts: muniteam-west@univar.com

Jennifer Perras
Municipal Specialist
Phone: (253) 872-5000
Fax: (253) 872-5041
Jennifer.perras@univar.com

Roise Holiday
Municipal Specialist
(253) 872-5000
(253) 872-5041
Roise.Holiday@univar.com

Stacy Ziegler
Municipal Specialist
(253) 872-5000
(253) 872-5041
Stacy.ziegler@univar.com

Shawnasey McCarthy
Municipal Business Manager
(253)872-5000
(253) 872-5041
Shawnasey.mccarthy@univar.com

Remittance Address:

Univar USA Inc
PO BOX 740896
LOS ANGELES, CA 90074-0896

Standard Payment Terms:

Net 30



Mission Statement

Univar sets out to be the preferred quality partner for the distribution of chemicals and services. We combine economic success with social and environmental responsibility.

Vision Statement

Be the benchmark of excellence.

Quality Policy

Univar USA Inc. is committed to the success of our customers and supplier/partners by providing value-added products and services that consistently meet requirements. In the spirit of innovation, management encourages full employee participation in the continuous review and improvement of Univar's business processes and its total quality process.

Statement of Core Values

- * *Safety: Safety is the first priority, the most important aspect of our work.*
- * *Continuous Improvement: We will improve results for all our stakeholders by doing the right things better every time.*
- * *Employees: We respect and value every employee and are committed to support and develop each other personally and professionally.*
- * *Environment: We are committed to protecting the health and well being of our employees, our customers, the community and the environment.*
- * *Ethics: We treat every individual in our business and personal practices ethically with integrity and honesty.*
- * *Leadership: Each of us strives to lead and motivate by example and consistently live up to these core values. We coach, train, develop and empower employees to reach their full potential.*



**Univar USA Inc.
Supplier Information
Company Overview**

Univar is a leading global distributor of industrial and specialty chemicals, with an extensive network of over 260 distribution facilities in North America, Europe, the Asia-Pacific region, and Latin America, and additional sales offices in Eastern Europe, the Middle East, and Africa.

We serve over 115,000 customers in more than 115 countries, representing nearly every major industry and a highly diverse set of end markets.

We source chemicals from more than 3,500 producers, including the premier global chemical manufacturers, and distribute more than 4,500 chemical products in over 110,000 stock keeping units.

In addition to our vast product offering, we provide important value-added services for our customers and suppliers, including:

- Product availability and inventory management
- Product specification and technical expertise
- Blending and mixing
- Repackaging and labeling
- Just-in-time delivery
- Vendor rationalization programs
- Waste management

Our scale, geographic reach, diversified distribution channels, industry expertise, and comprehensive product portfolio enable us to develop strong, long-term relationships with our suppliers and to provide a single-source solution for our customers.

As a world leader in chemical distribution, Univar is committed to being a responsible corporate citizen with a global focus on safety, health, the environment, and sustainability.



**Univar USA Inc.
Delivery & Supply Assurance**

In the event of an emergency situation such as a hurricane or other natural disaster, Univar's municipal water and wastewater accounts are given priority service over industrial customers.

Univar USA, Inc., has 124 locations across the US with thousands of trucks, 39 million gallons of bulk storage and over 10 million square feet of warehouse storage.

Our trucks are equipped with power and do not need electricity to deliver.

Our drivers are trained each year in spill control and containment, hazardous communication and modules of the Hazardous Waste Operations and Emergency Response Standard (HAZWOPER).



Univar USA Inc. Quality Assurance Statement

Univar USA Inc. ("Univar") offers this statement in regards to those quality measures it takes to provide quality products to you, its customer.

- Univar provides products that meet the manufacturer's specifications.
- Univar retains packaging samples and quality-related documents in accordance with its record retention program, which specifically calls for the retention of FDA regulated samples, and quality-related documents for three (3) years and EP samples and quality-related documents for six (6) years.
- Under Univar's Management of Change process, Univar forwards notices from a product's manufacturer related to ingredients, changes in processing sites, and manufacturing processes in a timely manner.
- Univar has a formalized recall process and provides notice of any known recalls or other matters that come to its attention that may directly or indirectly impact a product.
- Univar's quality control, employee training, and Safety, Health & Environmental programs meet industry standards.
- Univar develops, and maintains operational plans to meet, all federal, state, and local laws, rules, and regulations related to the packaging, storing, and distribution of products.
- Univar has facilities in the U.S. that are ISO 9001:2008 registered, including Univar's corporate office.
- Univar's facilities that handle FDA regulated product meet FDA cGMP standards.
- Univar's computer systems maintain various security controls to ensure proper management of information.

For food grade and pharmaceutical grade products:

- Univar treats FDA products under cGMP standards.
- Univar maintains strict laboratory controls, including Out of Specification ("OOS").
- Univar has a formal complaint process for all FDA regulated products.
- Univar performs bi-annual audits on its food grade packaging facilities to ensure quality and safety.
- Univar FDA packaging facilities and processes meet 21 CFR Part 210.
- Univar packages, stores, and transports under cGMP standards.
- Univar provides a Certificate of Analysis ("COA") with each shipment.
- Univar performs stability testing on all FDA Univar-packaged products.
- Univar maintains master files and individual batch files for all lots of FDA Univar-packaged products allowing full traceability.
- Univar assigns unique lot numbers and sequential numbers to its FDA Univar-packaged products.

Univar USA Inc

AFFIDAVIT RE DELIVERY REQUIREMENTS
FOR BID NO. 12-2018

STATE OF WASHINGTON)
)
COUNTY OF KING)

I, Jennifer Perras, the Municipal Specialist for Univar USA Inc. ("Univar") being duly sworn, states that I have read Section 3.7 of Bid No 12-2018 and knows its contents and hereby attests that if Univar utilizes the services of a third party hauling company for some or all of its deliveries, Univar will be responsible for ensuring that said hauler can and will deliver the product to each location shown on the bid documents.

Quality Carriers-2750 Goodrick Ave., Richmond, CA 94801	#510-232-8313
Watson Brothers- 13918 Jack Tone Rd., Manteca, CA 95336	#209-982-1031
Bulk Transportation-415 S. Lemon Ave., Walnut, CA 91789	#909-594-2855
Chemicals Transfer Co.-3105 South El Dorado St., Stockton, CA 95206	#209-466-3554
Reliable Liquid Transport-1041 College Ave., Santa Rosa, CA 95404	#707-579-2890

By _____

Jennifer M. Perras

SUBSCRIBED AND SWORN to before me this 16 day of April 2018, Jennifer M. Perras.



Raise Holiday
Notary Public for Washington, County of King
My Commission Expires: 4/24/19



The Public Health and Safety Organization

NSF Product and Service Listings

These NSF Official Listings are current as of **Friday, April 06, 2018** at 12:15 a.m. Eastern Time. Please contact NSF International to confirm the status of any Listing, report errors, or make suggestions.

Alert: NSF is concerned about fraudulent downloading and manipulation of website text. Always confirm this information by clicking on the below link for the most accurate information:

[http://info.nsf.org/Certified/PwsChemicals/Listings.asp?
CompanyName=K2&ChemicalName=Sodium+Hydroxide&](http://info.nsf.org/Certified/PwsChemicals/Listings.asp?CompanyName=K2&ChemicalName=Sodium+Hydroxide&)

NSF/ANSI 60 Drinking Water Treatment Chemicals - Health Effects

K2 Pure Solutions NoCal, L.P.

950 Loveridge Road

Pittsburg, CA 94565

United States

925-203-1190

Visit this company's website

(<http://www.k2pure.com>)

Facility : Pittsburg, CA

Sodium Hydroxide

Trade Designation

Sodium Hydroxide, 32% Solution, Membrane Corrosion & Scale Control
Grade pH Adjustment

Max Use

156mg/L

Sodium Hydroxide, 50% Solution, Membrane Corrosion & Scale Control
Grade pH Adjustment

100mg/L



The Public Health and Safety Organization

NSF Product and Service Listings

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Alert: NSF is concerned about fraudulent downloading and manipulation of website text. Always confirm this information by clicking on the below link for the most accurate information:

<http://info.nsf.org/Certified/PwsChemicals/Listings.asp?>

[CompanyName=Dow+chemical&ChemicalName=Sodium+Hydroxide&](http://info.nsf.org/Certified/PwsChemicals/Listings.asp?CompanyName=Dow+chemical&ChemicalName=Sodium+Hydroxide&)

NSF/ANSI 60 Drinking Water Treatment Chemicals - Health Effects

Dow Chemical Company (The)

1803 Building

Midland, MI 48674

United States

989-638-6231

Visit this company's website (<http://www.dow.com>)

Facility : Distribution Center - Pittsburg, CA

Sodium Hydroxide

Trade Designation

Product Function

Max Use

Caustic Soda Solution 15%, Membrane Grade	Corrosion & Scale Control pH Adjustment	333mg/L
Caustic Soda Solution 20% Membrane Grade	Corrosion & Scale Control pH Adjustment	250mg/L
Caustic Soda Solution 25%, Membrane Grade	Corrosion & Scale Control pH Adjustment	200mg/L

Caustic Soda Solution 30% Membrane Grade	Corrosion & Scale Control	166mg/L
	pH Adjustment	
Caustic Soda Solution 50%, Membrane Grade	Corrosion & Scale Control	100 mg/L
	pH Adjustment	

Number of matching Manufacturers is 1

Number of matching Products is 5

Processing time was 0 seconds



The Public Health and Safety Organization

NSF Product and Service Listings

These NSF Official Listings are current as of **Thursday, April 05, 2018** at 12:15 a.m. Eastern Time. Please [contact NSF International](#) to confirm the status of any Listing, report errors, or make suggestions.

Alert: NSF is concerned about fraudulent downloading and manipulation of website text. Always confirm this information by clicking on the below link for the most accurate information: <http://info.nsf.org/Certified/PwsChemicals/Listings.asp?CompanyName=Univar&ChemicalName=Sodium+Hydroxide&>

NSF/ANSI 60 Drinking Water Treatment Chemicals - Health Effects

Univar Canada Ltd.

9800 Van Horne Way
Richmond, BC V6X 1W5
Canada
604-273-1441

Facility : Edmonton, Alberta, Canada

Sodium Hydroxide

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Caustic Soda 25% Solution	Corrosion & Scale Control pH Adjustment	200mg/L
Caustic Soda 50% Solution	Corrosion & Scale Control pH Adjustment	100mg/L
Caustic Soda Solution 50%, Commercial Grade	Corrosion & Scale Control pH Adjustment	100mg/L
Caustic Soda Solution 50%, Membrane Grade	Corrosion & Scale Control pH Adjustment	100mg/L
Sodium Hydroxide 25% Solution	Corrosion & Scale Control pH Adjustment	200mg/L
Sodium Hydroxide 50% Solution	Corrosion & Scale Control pH Adjustment	100mg/L

NOTE: Only products bearing the NSF Mark on the product, product packaging, and/or documentation shipped with the product are Certified.

Facility : North Vancouver, British Columbia, Canada

Sodium Hydroxide

Trade Designation	Product Function	Max Use
Caustic Soda 25% Solution	Corrosion & Scale Control pH Adjustment	200mg/L
Caustic Soda 25%, Commercial Grade	Corrosion & Scale Control pH Adjustment	200mg/L
Caustic Soda 25%, Membrane Grade	Corrosion & Scale Control pH Adjustment	200mg/L
Caustic Soda Solution 50%, Commercial Grade	Corrosion & Scale Control pH Adjustment	100mg/L
Caustic Soda Solution 50%, Membrane Grade	Corrosion & Scale Control pH Adjustment	100mg/L
Sodium Hydroxide 25% Solution	Corrosion & Scale Control pH Adjustment	200mg/L

NOTE: Only products bearing the NSF Mark on the product, product packaging, and/or documentation shipped with the product are Certified.

Facility : Richmond, British Columbia, Canada**Sodium Hydroxide**

Trade Designation	Product Function	Max Use
Caustic Soda 25% Solution	Corrosion & Scale Control pH Adjustment	200mg/L
Caustic Soda 50% Solution	Corrosion & Scale Control pH Adjustment	100mg/L
Vanblend Caustic Soda 50%	Corrosion & Scale Control pH Adjustment	100mg/L
Vanblend LP 1422 (Caustic Soda 25% Solution)	Corrosion & Scale Control pH Adjustment	200mg/L

Facility : Sturgeon County, Alberta, Canada**Sodium Hydroxide**

Trade Designation	Product Function	Max Use
Caustic Soda 50% Solution	Corrosion & Scale Control pH Adjustment	100mg/L
Caustic Soda 50%, Commercial Grade	Corrosion & Scale Control pH Adjustment	100mg/L
Caustic Soda 50%, Membrane Grade	Corrosion & Scale Control pH Adjustment	100mg/L
Sodium Hydroxide 50% Solution	Corrosion & Scale Control pH Adjustment	100mg/L

NOTE: Only products bearing the NSF Mark on the product, product packaging, and/or documentation shipped with the product are Certified.

Facility : Valleyfield, Québec, Canada**Sodium Hydroxide**

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
CAUSTIC SODA 50%, MEMBRANE	Corrosion & Scale Control	200mg/L
	pH Adjustment	
Caustic Soda 25% Solution	Corrosion & Scale Control	200mg/L
	pH Adjustment	
Caustic Soda 30% Solution	Corrosion & Scale Control	333mg/L
	pH Adjustment	
Caustic Soda 50% - Diaphragm	Corrosion & Scale Control	100mg/L
	pH Adjustment	
Caustic Soda 50% Solution	Corrosion & Scale Control	200mg/L
	pH Adjustment	
Sodium Hydroxide 30% Solution	Corrosion & Scale Control	333mg/L
	pH Adjustment	
Sodium Hydroxide 50% Solution	Corrosion & Scale Control	200mg/L
	pH Adjustment	

NOTE: Only products bearing the NSF Mark on the product, product packaging, and/or documentation shipped with the product are Certified.

Facility : Winnipeg, Manitoba, Canada**Sodium Hydroxide**

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Caustic Soda 25% Solution	Corrosion & Scale Control	200mg/L
	pH Adjustment	
Caustic Soda 25%, Commercial Grade	Corrosion & Scale Control	200mg/L
	pH Adjustment	
Caustic Soda 25%, Membrane Grade	Corrosion & Scale Control	200mg/L
	pH Adjustment	
Caustic Soda 50% Solution	Corrosion & Scale Control	100mg/L
	pH Adjustment	
Caustic Soda Solution 50%, Commercial Grade	Corrosion & Scale Control	100mg/L
	pH Adjustment	
Caustic Soda Solution 50%, Membrane Grade	Corrosion & Scale Control	100mg/L
	pH Adjustment	
Sodium Hydroxide 25% Solution	Corrosion & Scale Control	200mg/L
	pH Adjustment	
Sodium Hydroxide 50% Solution	Corrosion & Scale Control	100mg/L
	pH Adjustment	

NOTE: Only products bearing the NSF Mark on the product, product packaging, and/or documentation shipped with the product are Certified.

Univar USA Inc.

17411 Northeast Union Hill Road
Redmond, WA 98052
United States
425-889-3400

Facility : # 1 Distribution Center - Richmond, CA**Sodium Hydroxide**

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Caustic Soda 15%	pH Adjustment	333mg/L
Caustic Soda 20%	pH Adjustment	250mg/L
Caustic Soda 25%	pH Adjustment	200mg/L
Caustic Soda 30%	pH Adjustment	165mg/L
Caustic Soda 50%	pH Adjustment	100mg/L
Sodium Hydroxide 15%	pH Adjustment	333mg/L
Sodium Hydroxide 20%	pH Adjustment	250mg/L
Sodium Hydroxide 25%	pH Adjustment	200mg/L
Sodium Hydroxide 30%	pH Adjustment	165mg/L
Sodium Hydroxide 50%	pH Adjustment	100mg/L

NOTE: Only products bearing the "NSF 60" designation are Certified by NSF International.

Facility : # 1 St. Louis, MO**Sodium Hydroxide**

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Caustic Soda 50%	Corrosion & Scale Control pH Adjustment	100mg/L
Sodium Hydroxide	Corrosion & Scale Control pH Adjustment	100mg/L
Sodium Hydroxide 50%	Corrosion & Scale Control pH Adjustment	100mg/L

NOTE: Only products bearing the "NSF 60" designation are Certified by NSF International.

Facility : # 1 Chattanooga, TN**Sodium Hydroxide**

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Caustic Soda 20%	Corrosion Control pH Adjustment	250mg/L
Caustic Soda 25%	pH Adjustment Corrosion & Scale Control	200mg/L

Caustic Soda 50%	Corrosion Control	100mg/L
	pH Adjustment	
Sodium Hydroxide 20%	Corrosion Control	250mg/L
	pH Adjustment	
Sodium Hydroxide 25%	pH Adjustment	200mg/L
	Corrosion & Scale Control	
Sodium Hydroxide 50%	Corrosion Control	100mg/L
	pH Adjustment	

NOTE: Only products bearing the "NSF 60" designation are Certified by NSF International.

Facility : # 2 St. Louis, MO

Sodium Hydroxide

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Caustic Soda 30% Solution	Corrosion & Scale Control	165mg/L
	pH Adjustment	
Caustic Soda 50% Solution	Corrosion & Scale Control	100mg/L
	pH Adjustment	
Sodium Hydroxide	Corrosion & Scale Control	100mg/L
	pH Adjustment	
Sodium Hydroxide - 50%	Corrosion & Scale Control	100mg/L
	pH Adjustment	
Sodium Hydroxide 30%	Corrosion & Scale Control	165mg/L
	pH Adjustment	

Facility : # 2 Chattanooga, TN

Sodium Hydroxide

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Caustic Soda 50%	Corrosion Control	100mg/L
	pH Adjustment	
Sodium Hydroxide 50%	Corrosion Control	100mg/L
	pH Adjustment	

NOTE: Only products bearing the "NSF 60" designation are Certified by NSF International.

Facility : Distribution Center - Phoenix 27th Ave., AZ

Sodium Hydroxide

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Caustic Soda 15%	pH Adjustment	333mg/L
Caustic Soda 20%	pH Adjustment	250mg/L
Caustic Soda 25%	pH Adjustment	200mg/L
Caustic Soda 30%	pH Adjustment	165mg/L

Caustic Soda 50%	pH Adjustment	100mg/L
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NOTE: Only products bearing the "NSF 60" designation are Certified by NSF International.

Facility : Distribution Center - Santa Fe Springs, CA

Sodium Hydroxide

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Caustic Soda 15%	pH Adjustment	333mg/L
Caustic Soda 20%	pH Adjustment	250mg/L
Caustic Soda 25%	pH Adjustment	200mg/L
Caustic Soda 30%	pH Adjustment	165mg/L
Caustic Soda 32%	pH Adjustment	156mg/L
Caustic Soda 50%	pH Adjustment	100mg/L
Sodium Hydroxide 32%	pH Adjustment	156mg/L

NOTE: Only products bearing the "NSF 60" designation are Certified by NSF International.

Facility : Distribution Center - Wilmington, CA

Sodium Hydroxide

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Caustic Soda 15%	pH Adjustment	333mg/L
Caustic Soda 20%	pH Adjustment	250mg/L
Caustic Soda 25%	pH Adjustment	200mg/L
Caustic Soda 3%	pH Adjustment	1667mg/L
Caustic Soda 30%	pH Adjustment	165mg/L
Caustic Soda 50%	pH Adjustment	100mg/L
Sodium Hydroxide 15%	pH Adjustment	333mg/L
Sodium Hydroxide 20%	pH Adjustment	250mg/L
Sodium Hydroxide 25%	pH Adjustment	200mg/L
Sodium Hydroxide 3%	pH Adjustment	1667mg/L
Sodium Hydroxide 30%	pH Adjustment	165mg/L
Sodium Hydroxide 50%	pH Adjustment	100mg/L

NOTE: Only products bearing the "NSF 60" designation are Certified by NSF International.

Facility : Redwood City, CA

Sodium Hydroxide

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Sodium Hydroxide 15%	pH Adjustment	333mg/L
Sodium Hydroxide 20%	pH Adjustment	250mg/L
Sodium Hydroxide 25%	pH Adjustment	200mg/L
Sodium Hydroxide 30%	pH Adjustment	165mg/L

Sodium Hydroxide 33%	pH Adjustment	152mg/L
Sodium Hydroxide 50%	pH Adjustment	100mg/L

NOTE: Only products bearing the "NSF 60" designation are Certified by NSF International.

Facility : Visalia, CA

Sodium Hydroxide

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Caustic Soda 15%	pH Adjustment	333mg/L
Caustic Soda 20%	pH Adjustment	250mg/L
Caustic Soda 25%	pH Adjustment	200mg/L
Caustic Soda 30%	pH Adjustment	165mg/L
Caustic Soda 50%	pH Adjustment	100mg/L
Sodium Hydroxide 15%	pH Adjustment	333mg/L
Sodium Hydroxide 20%	pH Adjustment	250mg/L
Sodium Hydroxide 25%	pH Adjustment	200mg/L
Sodium Hydroxide 30%	pH Adjustment	165mg/L
Sodium Hydroxide 50%	pH Adjustment	100mg/L

NOTE: Only products bearing the "NSF 60" designation are Certified by NSF International.

Facility : Denver, CO

Sodium Hydroxide

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Caustic Soda 15%	pH Adjustment	333mg/L
Caustic Soda 20%	pH Adjustment	250mg/L
Caustic Soda 25%	pH Adjustment	200mg/L
Caustic Soda 30%	pH Adjustment	165mg/L
Caustic Soda 50%	pH Adjustment	100mg/L

NOTE: Only products bearing the "NSF 60" designation are Certified by NSF International.

Facility : Distribution Center - Jacksonville Contanda Terminal, FL

Sodium Hydroxide

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Caustic Soda 15%	Corrosion & Scale Control pH Adjustment	333mg/L
Caustic Soda 20%	Corrosion & Scale Control pH Adjustment	250mg/L
Caustic Soda 25%	Corrosion & Scale Control pH Adjustment	200mg/L
Caustic Soda 30%		165mg/L

	Corrosion & Scale Control	
	pH Adjustment	
Caustic Soda 50%	Corrosion & Scale Control	100mg/L
	pH Adjustment	
Sodium Hydroxide 15%	Corrosion & Scale Control	333mg/L
	pH Adjustment	
Sodium Hydroxide 20%	Corrosion & Scale Control	250mg/L
	pH Adjustment	
Sodium Hydroxide 25%	Corrosion & Scale Control	200mg/L
	pH Adjustment	
Sodium Hydroxide 30%	Corrosion & Scale Control	165mg/L
	pH Adjustment	
Sodium Hydroxide 50%	Corrosion & Scale Control	100mg/L
	pH Adjustment	

NOTE: Only products bearing the "NSF 60" designation are Certified by NSF International.

Facility : Tampa, FL

Sodium Hydroxide

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Caustic Soda 20%	Corrosion & Scale Control	250mg/L
Caustic Soda 25%	Corrosion & Scale Control	200mg/L
Caustic Soda 50%	Corrosion & Scale Control	100mg/L
Sodium Hydroxide 20%	Corrosion & Scale Control	250mg/L
Sodium Hydroxide 25%	Corrosion & Scale Control	200mg/L
Sodium Hydroxide 50%	Corrosion & Scale Control	100mg/L

NOTE: Only products bearing the "NSF 60" designation are Certified by NSF International.

Facility : Distribution Center - Brunswick, GA

Sodium Hydroxide

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Caustic Soda 15%	pH Adjustment	333mg/L
	Corrosion & Scale Control	
Caustic Soda 20%	Corrosion & Scale Control	250mg/L
	pH Adjustment	
Caustic Soda 25%	Corrosion & Scale Control	200mg/L
	pH Adjustment	
Caustic Soda 30%	Corrosion & Scale Control	165mg/L
	pH Adjustment	
Caustic Soda 50%	Corrosion & Scale Control	100mg/L
	pH Adjustment	
Sodium Hydroxide 15%	Corrosion & Scale Control	333mg/L
	pH Adjustment	
Sodium Hydroxide 20%		250mg/L

	Corrosion & Scale Control	
	pH Adjustment	
Sodium Hydroxide 25%	Corrosion & Scale Control	200mg/L
	pH Adjustment	
Sodium Hydroxide 30%	Corrosion & Scale Control	165mg/L
	pH Adjustment	
Sodium Hydroxide 50%	Corrosion & Scale Control	100mg/L
	pH Adjustment	

Facility : Distribution Center - Dallas, GA**Sodium Hydroxide**

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Sodium Hydroxide 15%	pH Adjustment	333mg/L
Sodium Hydroxide 20%	pH Adjustment	250mg/L
Sodium Hydroxide 25%	pH Adjustment	200mg/L
Sodium Hydroxide 30%	pH Adjustment	165mg/L
Sodium Hydroxide 50%	pH Adjustment	100mg/L

NOTE: Only products bearing the "NSF 60" designation are Certified by NSF International.

Facility : Distribution Center - Savannah, GA**Sodium Hydroxide**

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Caustic Soda 15%	Corrosion & Scale Control	333mg/L
	pH Adjustment	
Caustic Soda 20%	Corrosion & Scale Control	250mg/L
	pH Adjustment	
Caustic Soda 25%	Corrosion & Scale Control	200mg/L
	pH Adjustment	
Caustic Soda 30%	Corrosion & Scale Control	165mg/L
	pH Adjustment	
Caustic Soda 50%	Corrosion & Scale Control	100mg/L
	pH Adjustment	
Sodium Hydroxide 15%	Corrosion & Scale Control	333mg/L
	pH Adjustment	
Sodium Hydroxide 20%	Corrosion & Scale Control	250mg/L
	pH Adjustment	
Sodium Hydroxide 25%	Corrosion & Scale Control	200mg/L
	pH Adjustment	
Sodium Hydroxide 30%	Corrosion & Scale Control	165mg/L
	pH Adjustment	
Sodium Hydroxide 50%	Corrosion & Scale Control	100mg/L
	pH Adjustment	

NOTE: Only products bearing the "NSF 60" designation are NSF Certified.

Facility : Norcross, GA**Sodium Hydroxide**

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Caustic Soda 20%	Corrosion & Scale Control	250mg/L
	pH Adjustment	
Caustic Soda 25%	Corrosion & Scale Control	200mg/L
	pH Adjustment	
Caustic Soda 32%	Corrosion Control	156mg/L
	pH Adjustment	
Caustic Soda 50%	Corrosion Control	100mg/L
	pH Adjustment	
Sodium Hydroxide 20%	Corrosion & Scale Control	250mg/L
	pH Adjustment	
Sodium Hydroxide 25%	Corrosion & Scale Control	200mg/L
	pH Adjustment	
Sodium Hydroxide 30-49%	Corrosion Control	100mg/L
	pH Adjustment	
Sodium Hydroxide 32%	Corrosion Control	156mg/L
	pH Adjustment	
Sodium Hydroxide 50%	Corrosion Control	100mg/L
	pH Adjustment	
Weak Caustic	Corrosion Control	100mg/L
	pH Adjustment	

NOTE: Only products bearing the "NSF 60" designation are Certified by NSF International.

Facility : Distribution Center - Lemont, IL**Sodium Hydroxide**

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Caustic Soda 15%	pH Adjustment	333mg/L
Caustic Soda 20%	pH Adjustment	250mg/L
Caustic Soda 25%	pH Adjustment	200mg/L
Caustic Soda 30%	pH Adjustment	165mg/L
Caustic Soda 50%	pH Adjustment	100mg/L
Sodium Hydroxide 15%	pH Adjustment	333mg/L
Sodium Hydroxide 17%	pH Adjustment	294mg/L
Sodium Hydroxide 20%	pH Adjustment	250mg/L
Sodium Hydroxide 25%	pH Adjustment	200mg/L
Sodium Hydroxide 30%	pH Adjustment	165mg/L
Sodium Hydroxide 50%	pH Adjustment	100mg/L

NOTE: Only products bearing the "NSF 60" designation are Certified by NSF International.

Facility : Distribution Center - Plainfield, IL**Sodium Hydroxide**

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Caustic Soda 15%	pH Adjustment	333mg/L
Caustic Soda 20%	pH Adjustment	250mg/L
Caustic Soda 25%	pH Adjustment	200mg/L
Caustic Soda 30%	pH Adjustment	165mg/L
Caustic Soda 50%	pH Adjustment	100mg/L

NOTE: Only products bearing the "NSF 60" designation are Certified by NSF International.

Facility : Distribution Center - Sauget, IL**Sodium Hydroxide**

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Caustic Soda 30%	Corrosion & Scale Control pH Adjustment	165mg/L
Caustic Soda 50%	Corrosion & Scale Control pH Adjustment	100mg/L
Sodium Hydroxide	Corrosion & Scale Control pH Adjustment	100mg/L
Sodium Hydroxide 30%	Corrosion & Scale Control pH Adjustment	165mg/L
Sodium Hydroxide 50%	Corrosion & Scale Control pH Adjustment	100mg/L

NOTE: Only products bearing the "NSF 60" designation are Certified by NSF International.

Facility : Kansas City, KS**Sodium Hydroxide**

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Caustic Soda 25%	Corrosion & Scale Control pH Adjustment	200mg/L
Caustic Soda 50%	Corrosion & Scale Control pH Adjustment	100mg/L
Sodium Hydroxide 25%	Corrosion & Scale Control pH Adjustment	200mg/L
Sodium Hydroxide 50%	Corrosion & Scale Control pH Adjustment	100mg/L

NOTE: Only products bearing the "NSF 60" designation are Certified by NSF International.

Facility : Geismar Highway 75, LA**Sodium Hydroxide**

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Caustic Soda 50%	Corrosion & Scale Control	100mg/L

NOTE: Only products bearing the "NSF 60" designation on the product, product packaging, and/or documentation shipped with the product are Certified.

Facility : Baltimore, MD**Sodium Hydroxide**

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Caustic Soda 10%	Corrosion & Scale Control pH Adjustment	500mg/L
Caustic Soda 15%	Corrosion & Scale Control pH Adjustment	333mg/L
Caustic Soda 20%	Corrosion & Scale Control pH Adjustment	250mg/L
Caustic Soda 25%	Corrosion & Scale Control pH Adjustment	200mg/L
Caustic Soda 30%	Corrosion & Scale Control pH Adjustment	165mg/L
Caustic Soda 35%	Corrosion & Scale Control pH Adjustment	143mg/L
Caustic Soda 50%	Corrosion & Scale Control pH Adjustment	100mg/L
Sodium Hydroxide 10%	Corrosion & Scale Control pH Adjustment	500mg/L
Sodium Hydroxide 15%	Corrosion & Scale Control pH Adjustment	333mg/L
Sodium Hydroxide 20%	Corrosion & Scale Control pH Adjustment	250mg/L
Sodium Hydroxide 25%	Corrosion & Scale Control pH Adjustment	200mg/L
Sodium Hydroxide 30%	Corrosion & Scale Control pH Adjustment	165mg/L
Sodium Hydroxide 50%	Corrosion & Scale Control pH Adjustment	100mg/L

NOTE: Only products bearing the "NSF 60" designation are Certified by NSF International.

Facility : St. Paul Westway Terminal, MN**Sodium Hydroxide**

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Caustic Soda 25%	Corrosion & Scale Control	200mg/L
Caustic Soda 50%	Corrosion & Scale Control	100mg/L
Sodium Hydroxide 25%	Corrosion & Scale Control	200mg/L
Sodium Hydroxide 50%	Corrosion & Scale Control	100mg/L

NOTE: Only products bearing the "NSF 60" designation are Certified by NSF International.

Facility : Omaha, NE

Sodium Hydroxide

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Caustic Soda 25%	Corrosion & Scale Control	200mg/L
	pH Adjustment	
Caustic Soda 30%	Corrosion & Scale Control	165mg/L
	pH Adjustment	
Caustic Soda 50%	Corrosion & Scale Control	100mg/L
	pH Adjustment	

NOTE: Only products bearing the "NSF 60" designation are Certified by NSF International.

Facility : Distribution Center - Carteret, NJ

Sodium Hydroxide

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Caustic Soda 15%	pH Adjustment	333mg/L
Caustic Soda 20%	pH Adjustment	250mg/L
Caustic Soda 25%	pH Adjustment	200mg/L
Caustic Soda 30%	pH Adjustment	165mg/L
Caustic Soda 50%	pH Adjustment	100mg/L
Sodium Hydroxide 15%	pH Adjustment	333mg/L
Sodium Hydroxide 20%	pH Adjustment	250mg/L
Sodium Hydroxide 25%	pH Adjustment	200mg/L
Sodium Hydroxide 30%	pH Adjustment	165mg/L
Sodium Hydroxide 50%	pH Adjustment	100mg/L

NOTE: Only products bearing the "NSF 60" designation are Certified by NSF International.

Facility : Distribution Terminal - Albuquerque, NM

Sodium Hydroxide

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Caustic Soda 50%	Corrosion & Scale Control	100mg/L
Sodium Hydroxide 50%	Corrosion & Scale Control	100mg/L

NOTE: Only products bearing the "NSF 60" designation on the product, product packaging, and/or documentation shipped with the product are Certified.

Facility : Charlotte, NC

Sodium Hydroxide

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Caustic Soda 25%	Corrosion Control pH Adjustment	200mg/L
Caustic Soda 32%	Corrosion Control pH Adjustment	156mg/L
Caustic Soda 50%	Corrosion Control pH Adjustment	100 mg/L
Sodium Hydroxide 25%	Corrosion Control pH Adjustment	200mg/L
Sodium Hydroxide 32%	Corrosion Control pH Adjustment	156mg/L
Sodium Hydroxide 50%	Corrosion Control pH Adjustment	100 mg/L

NOTE: Only products bearing the "NSF 60" designation are Certified by NSF International.

Facility : Distribution Center - Wilmington, NC

Sodium Hydroxide

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Caustic Soda 15%	pH Adjustment	333mg/L
Caustic Soda 20%	pH Adjustment	250mg/L
Caustic Soda 25%	pH Adjustment	200mg/L
Caustic Soda 30%	pH Adjustment	165mg/L
Caustic Soda 50%	pH Adjustment	100mg/L

NOTE: Only products bearing the "NSF 60" designation are Certified by NSF International.

Facility : Distribution Center - Toledo, OH

Sodium Hydroxide

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Sodium Hydroxide 50%	Corrosion Control pH Adjustment	100mg/L
Caustic Soda 50%	Corrosion Control pH Adjustment	100mg/L

NOTE: Only products bearing the "NSF 60" designation on the product, product packaging, and/or documentation shipped with the product are Certified.

Facility : Distribution Center - Walbridge, OH**Sodium Hydroxide**

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Caustic Soda 25%	Corrosion & Scale Control	200mg/L
	pH Adjustment	
Caustic Soda 50%	Corrosion & Scale Control	100mg/L
	pH Adjustment	
Sodium Hydroxide 25%	Corrosion & Scale Control	200mg/L
	pH Adjustment	
Sodium Hydroxide 50%	Corrosion & Scale Control	100mg/L
	pH Adjustment	

NOTE: Only products bearing the "NSF 60" designation are Certified by NSF International.

Facility : Twinsburg, OH**Sodium Hydroxide**

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Caustic Soda 25%	Corrosion & Scale Control	200mg/L
	pH Adjustment	
Caustic Soda 50%	Corrosion & Scale Control	100mg/L
	pH Adjustment	

NOTE: Only products bearing the "NSF 60" designation are Certified by NSF International.

Facility : Portland, OR**Sodium Hydroxide**

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Caustic Soda 15%	Corrosion & Scale Control	333mg/L
Caustic Soda 20%	Corrosion & Scale Control	250mg/L
Caustic Soda 25%	Corrosion & Scale Control	200mg/L
Caustic Soda 30%	Corrosion & Scale Control	165mg/L
Caustic Soda 33%	Corrosion & Scale Control	152mg/L
Caustic Soda 35%	Corrosion & Scale Control	143mg/L
Caustic Soda 50%	Corrosion & Scale Control	100mg/L

NOTE: Only products bearing the "NSF 60" designation on the product, product packaging, and/or documentation shipped with the product are Certified.

Facility : Altoona, PA

Sodium Hydroxide

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Caustic Soda 10%	Corrosion & Scale Control pH Adjustment	500mg/L
Caustic Soda 20%	Corrosion & Scale Control pH Adjustment	250mg/L
Caustic Soda 25%	Corrosion & Scale Control pH Adjustment	200mg/L
Caustic Soda 35%	Corrosion & Scale Control pH Adjustment	143mg/L
Caustic Soda 50%	Corrosion & Scale Control pH Adjustment	100mg/L

NOTE: Only products bearing the "NSF 60" designation are Certified by NSF International.

Facility : Bunola, PA**Sodium Hydroxide**

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Caustic Soda 10%	Corrosion & Scale Control pH Adjustment	500mg/L
Caustic Soda 20%	Corrosion & Scale Control pH Adjustment	250mg/L
Caustic Soda 25%	Corrosion & Scale Control pH Adjustment	200mg/L
Caustic Soda 30%	Corrosion & Scale Control pH Adjustment	165mg/L
Caustic Soda 35%	Corrosion & Scale Control pH Adjustment	143mg/L
Caustic Soda 40%	Corrosion & Scale Control pH Adjustment	125mg/L
Caustic Soda 50%	Corrosion & Scale Control pH Adjustment	100mg/L

NOTE: Only products bearing the "NSF 60" designation are Certified by NSF International.

Facility : Distribution Center - Morrisville Steel Road, PA**Sodium Hydroxide**

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Caustic Soda 15%	pH Adjustment	333mg/L
Caustic Soda 19%	pH Adjustment	263mg/L
Caustic Soda 20%	pH Adjustment	250mg/L
Caustic Soda 25%	pH Adjustment	200mg/L
Caustic Soda 30%	pH Adjustment	165mg/L
Caustic Soda 50%	pH Adjustment	100mg/L

NOTE: Only products bearing the "NSF 60" designation are Certified by NSF International.

Facility : Distribution Center - Philadelphia, PA

Sodium Hydroxide

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Caustic Soda 15%	pH Adjustment	333mg/L
Caustic Soda 18%	pH Adjustment	277mg/L
Caustic Soda 20%	pH Adjustment	250mg/L
Caustic Soda 25%	pH Adjustment	200mg/L
Caustic Soda 30%	pH Adjustment	165mg/L
Caustic Soda 50%	pH Adjustment	100mg/L
Sodium Hydroxide 15%	pH Adjustment	333mg/L
Sodium Hydroxide 18%	pH Adjustment	277mg/L
Sodium Hydroxide 20%	pH Adjustment	250mg/L
Sodium Hydroxide 25%	pH Adjustment	200mg/L
Sodium Hydroxide 30%	pH Adjustment	165mg/L
Sodium Hydroxide 50%	pH Adjustment	100mg/L

NOTE: Only products bearing the "NSF 60" designation are Certified by NSF International.

Facility : Middletown, PA

Sodium Hydroxide

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Caustic Soda 10%	Corrosion & Scale Control	500mg/L
	pH Adjustment	
Caustic Soda 20%	Corrosion & Scale Control	250mg/L
	pH Adjustment	
Caustic Soda 25%	Corrosion & Scale Control	200mg/L
	pH Adjustment	
Caustic Soda 35%	Corrosion & Scale Control	143mg/L
	pH Adjustment	
Caustic Soda 50%	Corrosion & Scale Control	100mg/L
	pH Adjustment	
Caustic Soda 7%	Corrosion & Scale Control	700mg/L
Sodium Hydroxide 10%	Corrosion & Scale Control	500mg/L
	pH Adjustment	
Sodium Hydroxide 20%	Corrosion & Scale Control	250mg/L
	pH Adjustment	
Sodium Hydroxide 25%	Corrosion & Scale Control	200mg/L
	pH Adjustment	
Sodium Hydroxide 35%	Corrosion & Scale Control	143mg/L
	pH Adjustment	
Sodium Hydroxide 50%	Corrosion & Scale Control	100mg/L
	pH Adjustment	

Sodium Hydroxide 7%	Corrosion & Scale Control pH Adjustment	700mg/L
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NOTE: Only products bearing the "NSF 60" designation are Certified by NSF International.

Facility : Providence, RI

Sodium Hydroxide		
<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Caustic Soda 10% Solution	Corrosion & Scale Control pH Adjustment	500mg/L
Caustic Soda 25% Solution	Corrosion & Scale Control pH Adjustment	200mg/L
Caustic Soda 35% Solution	Corrosion & Scale Control pH Adjustment	143mg/L
Caustic Soda 50% Solution	Corrosion & Scale Control pH Adjustment	100mg/L

NOTE: Only products bearing the "NSF 60" designation are Certified by NSF International.

Facility : Charleston, SC

Sodium Hydroxide		
<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Caustic Soda 25%	Corrosion & Scale Control pH Adjustment	200mg/L
Caustic Soda 30%	Corrosion & Scale Control pH Adjustment	165mg/L
Caustic Soda 40%	Corrosion & Scale Control pH Adjustment	125mg/L
Caustic Soda 50%	Corrosion & Scale Control pH Adjustment	100mg/L
Sodium Hydroxide 25%	Corrosion & Scale Control pH Adjustment	200mg/L
Sodium Hydroxide 30%	Corrosion & Scale Control pH Adjustment	165mg/L
Sodium Hydroxide 40%	Corrosion & Scale Control pH Adjustment	125mg/L
Sodium Hydroxide 50%	Corrosion & Scale Control pH Adjustment	100mg/L

NOTE: Only products bearing the "NSF 60" designation are Certified by NSF International.

Facility : Spartanburg, SC

Sodium Hydroxide		
<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Caustic Soda 20%	Corrosion Control pH Adjustment	250 mg/L
Caustic Soda 25%	Corrosion Control pH Adjustment	200 mg/L
Caustic Soda 32%	Corrosion Control pH Adjustment	156mg/L
Caustic Soda 50%	Corrosion Control pH Adjustment	100 mg/L
Sodium Hydroxide 20%	Corrosion Control pH Adjustment	250 mg/L
Sodium Hydroxide 25%	Corrosion Control pH Adjustment	200 mg/L
Sodium Hydroxide 30-49%	Corrosion Control pH Adjustment	100mg/L
Sodium Hydroxide 32%	Corrosion Control pH Adjustment	156mg/L
Sodium Hydroxide 50%	Corrosion Control pH Adjustment	100 mg/L
Weak Caustic	Corrosion Control pH Adjustment	100mg/L

NOTE: Only products bearing the "NSF 60" designation are Certified by NSF International.

Facility : Borger, TX

Sodium Hydroxide		
<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Caustic Soda 25%	Corrosion & Scale Control pH Adjustment	200mg/L
Caustic Soda 50%	Corrosion & Scale Control pH Adjustment	100mg/L
Sodium Hydroxide 25%	Corrosion & Scale Control pH Adjustment	200mg/L
Sodium Hydroxide 50%	Corrosion & Scale Control pH Adjustment	100mg/L

NOTE: Only products bearing the "NSF 60" designation are Certified by NSF International.

Facility : Distribution Center - Houston Luthe Road, TX

Sodium Hydroxide		
<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Caustic Soda 15%	pH Adjustment	333mg/L
Caustic Soda 20%	pH Adjustment	250mg/L

Caustic Soda 25%	pH Adjustment	200mg/L
Caustic Soda 30%	pH Adjustment	165mg/L
Caustic Soda 50%	pH Adjustment	100mg/L

NOTE: Only products bearing the "NSF 60" designation are Certified by NSF International.

Facility : Distribution Center - Houston, TX

Sodium Hydroxide		
<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Caustic Soda - 25%	Corrosion & Scale Control pH Adjustment	200mg/L
Caustic Soda - 50%	Corrosion & Scale Control pH Adjustment	100mg/L
Sodium Hydroxide	Corrosion & Scale Control pH Adjustment	100mg/L
Sodium Hydroxide - 25%	Corrosion & Scale Control pH Adjustment	200mg/L
Sodium Hydroxide - 50%	Corrosion & Scale Control pH Adjustment	100mg/L

NOTE: Only products bearing the "NSF 60" designation are Certified by NSF International.

Facility : Salt Lake City, UT

Sodium Hydroxide		
<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Caustic Soda 30%	pH Adjustment	165mg/L
Caustic Soda 50%	pH Adjustment	100mg/L

NOTE: Only products bearing the "NSF 60" designation are Certified by NSF International.

Facility : Chester, VA

Sodium Hydroxide		
<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Caustic Soda 25%	Corrosion Control pH Adjustment	200mg/L
Caustic Soda 32%	Corrosion Control pH Adjustment	156mg/L
Caustic Soda 50%	Corrosion Control pH Adjustment	100mg/L
Sodium Hydroxide 25%	Corrosion Control pH Adjustment	200mg/L
Sodium Hydroxide 32%		156mg/L

Sodium Hydroxide 50%	Corrosion Control	100mg/L
	pH Adjustment	
	Corrosion Control	
	pH Adjustment	

[AL] Based on an evaluation of health effects data, the level of aluminum in the finished drinking water shall not exceed 2 mg/L.

NOTE: Only products bearing the "NSF 60" designation are Certified by NSF International.

Facility : Distribution Center - Norfolk, VA

Sodium Hydroxide

Trade Designation

Caustic Soda 50%

Product Function

Corrosion & Scale Control

pH Adjustment

Max Use

100mg/L

NOTE: Only products bearing the "NSF 60" designation are Certified by NSF International.

Facility : Distribution Center - Vancouver, WA

Sodium Hydroxide

Trade Designation

Caustic Soda 15%

Caustic Soda 20%

Caustic Soda 25%

Caustic Soda 30%

Caustic Soda 50%

Sodium Hydroxide 15%

Sodium Hydroxide 20%

Sodium Hydroxide 25%

Sodium Hydroxide 30%

Sodium Hydroxide 50%

Product Function

Corrosion & Scale Control

Corrosion & Scale Control

Corrosion & Scale Control

Corrosion & Scale Control

Corrosion & Scale Control

Corrosion & Scale Control

Corrosion & Scale Control

Corrosion & Scale Control

Corrosion & Scale Control

Corrosion & Scale Control

Max Use

333mg/L

250mg/L

200mg/L

165mg/L

100mg/L

333mg/L

250mg/L

200mg/L

165mg/L

100mg/L

NOTE: Only products bearing the "NSF 60" designation are Certified by NSF International.

Facility : Kent, WA

Sodium Hydroxide

Trade Designation

Caustic Soda 15%

Caustic Soda 20%

Caustic Soda 25%

Caustic Soda 30%

Caustic Soda 33%

Product Function

Corrosion & Scale Control

Corrosion & Scale Control

Corrosion & Scale Control

Corrosion & Scale Control

Corrosion & Scale Control

Max Use

333mg/L

250mg/L

200mg/L

165mg/L

152mg/L

Caustic Soda 35%	Corrosion & Scale Control	143mg/L
Caustic Soda 50%	Corrosion & Scale Control	100mg/L

NOTE: Only products bearing the "NSF 60" designation are Certified by NSF International.

Facility : Cincinnati Dues Drive, OH

Sodium Hydroxide		
<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Caustic Soda 10%	Corrosion & Scale Control	500mg/L
	pH Adjustment	
Caustic Soda 12.5%	Corrosion & Scale Control	400mg/L
	pH Adjustment	
Caustic Soda 20%	Corrosion & Scale Control	250mg/L
	pH Adjustment	
Caustic Soda 25%	Corrosion & Scale Control	200mg/L
	pH Adjustment	
Caustic Soda 30%	Corrosion & Scale Control	165mg/L
	pH Adjustment	
Caustic Soda 35%	Corrosion & Scale Control	143mg/L
	pH Adjustment	
Caustic Soda 50%	Corrosion & Scale Control	100mg/L
	pH Adjustment	

NOTE: Only products bearing the "NSF 60" designation are Certified by NSF International.

Facility : Dallas Bekay Street, TX

Sodium Hydroxide		
<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Caustic Soda 20%	Corrosion Control	250mg/L
	pH Adjustment	
Caustic Soda 25%	Corrosion Control	200mg/L
	pH Adjustment	
Caustic Soda 50%	Corrosion Control	100mg/L
	pH Adjustment	
Sodium Hydroxide 20%	Corrosion Control	250mg/L
	pH Adjustment	
Sodium Hydroxide 25%	Corrosion Control	200mg/L
	pH Adjustment	
Sodium Hydroxide 50%	Corrosion Control	100mg/L
	pH Adjustment	

NOTE: Only products bearing the "NSF 60" designation are Certified by NSF International.

Facility : Houston Brisbane, TX

Sodium Hydroxide		
<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Caustic Soda 20%	Corrosion & Scale Control pH Adjustment	250 mg/L
Caustic Soda 25%	Corrosion & Scale Control pH Adjustment	200 mg/L
Caustic Soda 50%	Corrosion & Scale Control pH Adjustment	100 mg/L
Sodium Hydroxide 20%	Corrosion & Scale Control pH Adjustment	250 mg/L
Sodium Hydroxide 25%	Corrosion & Scale Control pH Adjustment	200 mg/L
Sodium Hydroxide 50%	Corrosion & Scale Control pH Adjustment	100 mg/L

NOTE: Only products bearing the "NSF 60" designation are Certified by NSF International.

Facility : Phoenix 45th Avenue, AZ

Sodium Hydroxide		
<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Caustic Soda 25%	pH Adjustment	200mg/L
Caustic Soda 50%	pH Adjustment	100mg/L

NOTE: Only products bearing the "NSF 60" designation are Certified by NSF International.

Univar USA Inc.
17411 Northeast Union Hill Road
Redmond, WA 98052
United States
425-889-3679

Facility : Rayong Province, Thailand

Sodium Hydroxide		
<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Caustic Soda Micropearls	Corrosion & Scale Control pH Adjustment	100mg/L

Univar USA Inc.

17411 Northeast Union Hill Road
Redmond, WA 98052
United States
425-889-3400

Facility : # 26 Pittsburg, CA

Sodium Hydroxide

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Caustic Soda Solution 15%	Corrosion & Scale Control pH Adjustment	333mg/L
Caustic Soda Solution 20%	Corrosion & Scale Control pH Adjustment	250mg/L
Caustic Soda Solution 25%	Corrosion & Scale Control pH Adjustment	200mg/L
Caustic Soda Solution 30%	Corrosion & Scale Control pH Adjustment	166mg/L
Caustic Soda Solution 50%	Corrosion & Scale Control pH Adjustment	100mg/L
Sodium Hydroxide 15%	Corrosion & Scale Control pH Adjustment	333mg/L
Sodium Hydroxide 20%	Corrosion & Scale Control pH Adjustment	250mg/L
Sodium Hydroxide 25%	Corrosion & Scale Control pH Adjustment	200mg/L
Sodium Hydroxide 30%	Corrosion & Scale Control pH Adjustment	166mg/L
Sodium Hydroxide 50%	Corrosion & Scale Control pH Adjustment	100mg/L

Univar USA Inc. (Formerly Basic Chemical Solutions)

17425 Northeast Union Hill Road
Redmond, WA 98052
United States
425-889-3400

Facility : # 18 USA

Sodium Hydroxide

<i>Trade Designation</i>	<i>Product Function</i>	<i>Max Use</i>
Caustic Soda 32%	Corrosion & Scale Control pH Adjustment	156mg/L
Caustic Soda 50%	Corrosion & Scale Control pH Adjustment	100mg/L
Sodium Hydroxide 32%		156mg/L

Sodium Hydroxide 50%	Corrosion & Scale Control	
	pH Adjustment	
	Corrosion & Scale Control	100mg/L
	pH Adjustment	

Number of matching Manufacturers is 5

Number of matching Products is 381

Processing time was 1 seconds

Univar
12522 Los Nietos Rd
Santa Fe Springs, CA 90670
USA

www.univar.com



Memorandum

Date March 30, 2018
From Tom Edman, Sr. Product Manager, Caustic Soda
Re BACC Bid No. 12-2018: Deviation from BACC NaOH Specifications

In accordance with Bid No. 12-2018, Section 2.12, Proposed Deviations from the Specifications by the Bidder, Univar intends to supply sodium hydroxide solution to BACC meeting the following technical specifications:

UNIVAR PRODUCT TECHNICAL SPECIFICATIONS SODIUM HYDROXIDE, 50% Solution

Characteristics	Units	Minimum	Maximum
Sodium Hydroxide, NaOH	Wt %	48	52
Sodium Oxide, Na ₂ O	Wt %	37.7	40.4
Sodium Chloride, NaCl	PPM	0	100.00
Sodium Carbonate, Na ₂ CO ₃	Wt %	0	0.30
Sodium Chlorate, NaClO ₃	PPM	0	50
Sodium Sulfate, Na ₂ SO ₄	PPM	0	100
Nickel, Ni	PPM	0	0.5 *
Iron, Fe	PPM	0	5 *
Mercury, Hg	PPM	0	2
Specific Gravity		1.45	1.60

* Sodium hydroxide for wastewater treatment applications may contain up to 9 ppm iron (Fe) and 3 ppm nickel (Ni)

UNIVAR PRODUCT TECHNICAL SPECIFICATIONS SODIUM HYDROXIDE, 30% Solution

Characteristics	Units	Minimum	Maximum
Sodium Hydroxide, NaOH	Wt %	29	32
Sodium Oxide, Na ₂ O	Wt %	22.5	23.7
Sodium Chloride, NaCl	PPM	0	100
Sodium Carbonate, Na ₂ CO ₃	Wt %	0	0.15
Sodium Chlorate, NaClO ₃	PPM	0	31
Sodium Sulfate, Na ₂ SO ₄	PPM	0	80
Nickel, Ni	PPM	0	0.5 *
Iron, Fe	PPM	0	5 *
Mercury, Hg	PPM	0	2
Specific Gravity		1.25	1.40

* Sodium hydroxide for wastewater treatment applications may contain up to 9 ppm iron (Fe) and 3 ppm nickel (Ni)

**UNIVAR PRODUCT TECHNICAL SPECIFICATIONS
SODIUM HYDROXIDE, 25% Solution**

Characteristics	Units	Minimum	Maximum
Sodium Hydroxide, NaOH	Wt %	23	27
Sodium Oxide, Na ₂ O	Wt %	15.5	20.2
Sodium Chloride, NaCl	PPM	0	100
Sodium Carbonate, Na ₂ CO ₃	Wt %	0	0.15
Sodium Chlorate, NaClO ₃	PPM	0	26
Sodium Sulfate, Na ₂ SO ₄	PPM	0	80
Nickel, Ni	PPM	0	0.5 *
Iron, Fe	PPM	0	5 *
Mercury, Hg	PPM	0	2
Specific Gravity		1.20	1.35

* Sodium hydroxide for wastewater treatment applications may contain up to 9 ppm iron (Fe) and 3 ppm nickel (Ni)

**UNIVAR PRODUCT TECHNICAL SPECIFICATIONS
SODIUM HYDROXIDE, 20% Solution**

Characteristics	Units	Minimum	Maximum
Sodium Hydroxide, NaOH	Wt %	19	21
Sodium Oxide, Na ₂ O	Wt %	14.37	16.28
Sodium Chloride, NaCl	PPM	0	100
Sodium Carbonate, Na ₂ CO ₃	Wt %	0	0.15
Sodium Chlorate, NaClO ₃	PPM	0	20
Sodium Sulfate, Na ₂ SO ₄	PPM	0	80
Nickel, Ni	PPM	0	0.5 *
Iron, Fe	PPM	0	5 *
Mercury, Hg	PPM	0	2
Specific Gravity		1.2124	1.2344

* Sodium hydroxide for wastewater treatment applications may contain up to 9 ppm iron (Fe) and 3 ppm nickel (Ni)



ATTACHMENT D
221 Boston Post Road East
Suite 230
Marlborough, MA 01752
Tel: (508) 480 6720 /Fax: (508) 480 8712

CERTIFICATE OF ANALYSIS
Sodium Hydroxide, 20% Solution
Dow Chemical Co
Pittsburg, CA

Customer: **Bay Area Chemical Consortium, CA**

Date of Delivery: _____

Order Number: _____

Shipper ID: _____

<u>Property</u>	<u>Unit</u>	<u>Result</u>	<u>BACC Specs</u>
Sodium Hydroxide (NaOH)	Wt %	20.26	19 – 21
Sodium Oxide (Na ₂ O)	Wt%	15.68	14.37 – 16.28
Sodium Chloride (NaCl)	PPM	28	100 MAX
Sodium Carbonate (Na ₂ CO ₃)	Wt%	0.02	0.15 MAX
Sodium Chlorate (NaClO ₃)	PPM	15	20 MAX
Sodium Sulfate (Na ₂ SO ₄)	PPM	20	80 MAX
Iron (Fe)	PPM	0.6	5 MAX*
Nickel (Ni)	PPM	<0.2	0.5 MAX*
Mercury (Hg)	PPM	<or=0.02	2 MAX
Color / Appearance		Clear & Bright	
Specific Gravity @ 60/60		1.2120	1.2124 – 1.2344
Density @ 60°F	lbs/gal	10.0938	

* Sodium Hydroxide for wastewater treatment applications is allowed to have up to 9 mg/l for iron (Fe) and up to 3 mg/l for nickel (Ni)

Effective Date: **4/05/2018**

Replaces: **N/A**



Testing Company: **Dow**
Survey Number: **D465142001**
Shipment Information: **20180404**
Lot Number: **D465142001**
Manufacturer: **Dow**
(Last Receipt)
Date of Manufacture: **4/02/2018**

ANSI/NSF Standard 60
Drinking Water Treatment Additives72SN
Maximum Use Level: 100 mg/L (50% Sodium Hydroxide)
Maximum Use Level: 250 mg/L (20% Sodium Hydroxide)

Prepared by: _____
Approved by: _____

Consult the SDS for additional information.

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QA 6.20 x 4: 8/19/2015



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221 Boston Post Road East
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Marlborough, MA 01752
Tel: (508) 480 6720 /Fax: (508) 480 8712

CERTIFICATE OF ANALYSIS
Sodium Hydroxide, 25% Solution
Dow Chemical Co
Pittsburg, CA

Customer: **Bay Area Chemical Consortium, CA**

Date of Delivery: _____

Order Number: _____

Shipper ID: _____

<u>Property</u>	<u>Unit</u>	<u>Result</u>	<u>BACC Specs</u>
Sodium Hydroxide (NaOH)	Wt %	25.32	23 – 27
Sodium Oxide (Na ₂ O)	Wt%	19.60	15.5 – 20.2
Sodium Chloride (NaCl)	PPM	35	100 MAX
Sodium Carbonate (Na ₂ CO ₃)	Wt%	0.03	0.15 MAX
Sodium Chlorate (NaClO ₃)	PPM	19	26 MAX
Sodium Sulfate (Na ₂ SO ₄)	PPM	25	80 MAX
Iron (Fe)	PPM	0.8	5 MAX*
Nickel (Ni)	PPM	<0.25	0.5 MAX*
Mercury (Hg)	PPM	<or=0.025	2 MAX
Color / Appearance		Clear & Bright	
Specific Gravity @ 60/60		1.265	1.20 – 1.35
Density @ 60°F	lbs/gal	10.5352	

* Sodium Hydroxide for wastewater treatment applications is allowed to have up to 9 mg/l for Iron (Fe) and up to 3 mg/l for nickel (Ni)

Effective Date: 4/05/2018

Replaces: N/A



Testing Company: Dow

Survey Number: D46512001

Shipment Information: 20180404

Lot Number: D46512001

Manufacturer: Dow Chem Co

(Last Receipt)

Date of Manufacture: 4/02/2018

ANSI/NSF Standard 60

Drinking Water Treatment Additives 72SN

Maximum Use Level: 100 mg/L (50% Sodium Hydroxide)

Maximum Use Level: 200 mg/L (25% Sodium Hydroxide)

Prepared by: _____

Approved by: _____

Consult the SDS for additional information.

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QA 6.20 x 4: 8/19/2015



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221 Boston Post Road East
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Marlborough, MA 01752
Tel: (508) 480 6720 /Fax: (508) 480 8712

CERTIFICATE OF ANALYSIS
Sodium Hydroxide, 30% Solution
Dow Chemical Co
Pittsburg, CA

Customer: **Bay Area Chemical Consortium, CA**

Date of Delivery: _____

Order Number: _____

Shipper ID: _____

<u>Property</u>	<u>Unit</u>	<u>Result</u>	<u>BACC Specs</u>
Sodium Hydroxide (NaOH)	Wt %	30.38	29 – 32
Sodium Oxide (Na ₂ O)	Wt%	23.52	22.5 – 23.7
Sodium Chloride (NaCl)	PPM	42	100 MAX
Sodium Carbonate (Na ₂ CO ₃)	Wt%	0.03	0.15 MAX
Sodium Chlorate (NaClO ₃)	PPM	23	31 MAX
Sodium Sulfate (Na ₂ SO ₄)	PPM	30	80 MAX
Iron (Fe)	PPM	1.0	5 MAX*
Nickel (Ni)	PPM	<0.3	0.5 MAX*
Mercury (Hg)	PPM	<or=0.03	2 MAX
Color / Appearance		Clear & Bright	
Specific Gravity @ 60/60		1.318	1.25 – 1.40
Density @ 60°F	lbs/gal	10.9766	

* Sodium Hydroxide for wastewater treatment applications is allowed to have up to 9 mg/l for iron (Fe) and up to 3 mg/l for nickel (Ni)

Effective Date: 4/05/2018

Replaces: N/A



Certified to
NSF/ANSI 60

ANSI/NSF Standard 60
Drinking Water Treatment Additives72SN
Maximum Use Level: 100 mg/L (50% Sodium Hydroxide)
Maximum Use Level: 165 mg/L (30% Sodium Hydroxide)

Testing Company: Dow
Survey Number: D465142001
Shipment Information: 20180404
Lot Number: D465142001
Manufacturer: Dow Chem Co
(Last Receipt)
Date of Manufacture: 4/02/2018

Prepared by: _____

Approved by: _____

Consult the SDS for additional information.

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Marlborough, MA 01752
Tel: (508) 480 6720 /Fax: (508) 480 8712

CERTIFICATE OF ANALYSIS
Sodium Hydroxide, 50% Solution
Dow Chemical Co
Pittsburg, CA

Customer: **Bay Area Chemical Consortium, CA**

Date of Delivery: _____

Order Number: _____

Shipper ID: _____

<u>Property</u>	<u>Unit</u>	<u>Result</u>	<u>BACC Specs</u>
Sodium Hydroxide (NaOH)	Wt %	50.64	48 – 52
Sodium Oxide (Na ₂ O)	Wt%	39.2	37.7 – 40.4
Sodium Chloride (NaCl)	PPM	70	100 MAX
Sodium Carbonate (Na ₂ CO ₃)	Wt%	0.05	0.30 MAX
Sodium Chlorate (NaClO ₃)	PPM	38	50 MAX
Sodium Sulfate (Na ₂ SO ₄)	PPM	50	100 MAX
Iron (Fe)	PPM	1.6	5 MAX*
Nickel (Ni)	PPM	<0.5	0.5 MAX*
Mercury (Hg)	PPM	<or=0.05	2 MAX
Color / Appearance		Clear & Bright	
Specific Gravity @ 60/60		1.530	1.45 – 1.60
Density @ 60°F	lbs/gal	12.7422	

* Sodium Hydroxide for wastewater treatment applications is allowed to have up to 9 mg/l for iron (Fe) and up to 3 mg/l for nickel (Ni)

Effective Date: 4/05/2018

Replaces: N/A



Testing Company: Dow

Survey Number: D465142001

Shipment Information: 20180404

Lot Number: D465142001

Manufacturer: Dow Chem Co

(Last Receipt)

Date of Manufacture: 4/02/2018

ANSI/NSF Standard 60
Drinking Water Treatment Additives72SN
Maximum Use Level: 100 mg/L (50% Sodium Hydroxide)

Prepared by: _____

Approved by: _____

Consult the SDS for additional information.

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QA 6.20 x 4: 8/19/2015

Date 2017-10-27 (YYYY-MM-DD) Time 16:04:56 (Greenwich Mean Time) Page 1 of 2

Product Number: 731365 Order: PX196468



THE DOW CHEMICAL COMPANY

UNIVAR USA INC
SAN JOSE BRANCH
2256 JUNCTION AVE.
SAN JOSE CA 95131-1216

Ship From: PITT K2 PURE SOLUTION Sub Mft
PITTSBURG
California, United States

Certificate of Analysis

Product Number 00099037659
Product Name
DAS K2 Caustic Soda 50 MEM
Delivery No. 811243860 / 000010
Order Number 107136978
Date Shipped 2017-10-27 (YYYY-MM-DD)
Shipment No. 30590966

Customer Information

Customer Name UNIVAR USA INC
Customer PO number MM 220193
Customer Product Code 99037659
Container ID UNVX005896
Specification Number 000000420063

Batch Number D465HAQ001
Expiration Date 2045-03-12 (YYYY-MM-DD)
Manufacturing Date 2017-10-26 (YYYY-MM-DD)
Quantity 190800.000 LB
Net Weight 190800.001 LB / 86545.354 KG
Manufacturing Plant PITT K2 PURE SOLUTION Sub Mft
Manufacturer Address 901 LOVERIDGE RD
PITTSBURG
California 94565-2811
Country of Origin US
Country of Origin Name United States
This product has been certified to NSF®*- 60 at a maximum use level of 100 mg/L.
®* - is a trademark of NSF International

This product is Kosher certified

As noted on the specification, based on an assay concentration (as NaOH) of 48.5% - 51.5%, this product meets the following test requirements of the Food Chemicals Codex (FCC), current edition, for Sodium Hydroxide solution:

Arsenic (as As) - 1.5 mg/kg maximum
Carbonate (as Na₂CO₃) - 1.5% maximum
Lead (as Pb) - 1 mg/kg maximum
Mercury - 0.05 mg/kg maximum

Users of Caustic Soda Solution in food-related applications must carefully assess this product to determine if it is suitable for the intended application. It cannot be assumed that products meeting the FCC test requirements set forth above are suitable for food usage.

Intertek

caleb brett

Report of Analysis

Client:	Univar USA Inc	Client Reference Number:
Job Location:	San Francisco, CA, USA	None
Our Reference Number:	US410-0016692	
Lab Reference Number:	2018-SANF-000335	

Sample ID:	2018-SANF-000335-002	Date Taken:	14-Mar-18
Sample Designated As:	Caustic Soda	Date Submitted:	14-Mar-18
Vessel/Location:	Submitted Samples	Date Tested:	15-Mar-18
Representing:	DAS K2 Caustic Soda 50 MEM		

Method	Test	Result	Unit	Spec Limit
ITM 1059	Silver	<1.0	ppm Wt	Max 5
ITM 1059	Arsenic	<1.0	ppm Wt	Max 5
ITM 1059	Barium	<1.0	ppm Wt	Max 100
ITM 1059	Cadmium	<1.0	ppm Wt	Max 1
ITM 1059	Chromium	<1.0	ppm Wt	Max 5
ITM 1059	Lead	<1.0	ppm Wt	Max 5
ITM 1059	Selenium	<1.0	ppm Wt	Max 1
ITM 1059	Nickel	<0.5	ppm Wt	Max 0.5
ASTM D7623	Mercury	<0.005	ppm Wt	Max 0.2

Signed: _____



Intertek
Dzmityr Kupchyn, Quality Manager

Date: 4/6/2018



Univar
 3075 Highland Pkwy STE 200
 Downers Grove, IL 60515
 425-889-3400

SAFETY DATA SHEET

1. Identification

Product identifier: - CAUSTIC SODA 50%

Other means of identification

Synonyms: Sodium Hydroxide
CAS NUMBERS: 1310-73-2
SDS number: 000100000088

Recommended use and restriction on use

Recommended use: Reserved for industrial and professional use.

Restrictions on use: Not known.

Manufacturer/Importer/Supplier/Distributor Information

Univar

3075 Highland Pkwy STE 200

Downers Grove, IL 60515

425-889-3400

Emergency telephone number: For emergency assistance Involving chemicals

call CHEMTREC day or night at: 1-800-424-9300. CHEMTREC INTERNATIONAL Tel# 703-527-3887

2. Hazard(s) identification

Hazard Classification

Health Hazards

Acute toxicity (Oral) Category 4

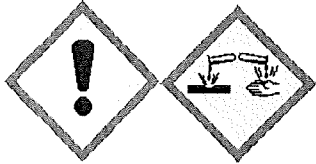
Skin Corrosion/Irritation Category 1A

Serious Eye Damage/Eye Irritation Category 1

Environmental Hazards Acute hazards to the aquatic environment Category 3

Label Elements

Hazard Symbol



Signal Word

Danger

Hazard Statement

Corrosive.
Harmful if swallowed.
Causes severe skin burns and eye damage.

Precautionary Statements

Prevention

Do not breathe dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Do not eat, drink or smoke when using this product.

Response

IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. IF SWALLOWED: Call a POISON CENTER/doctor/ if you feel unwell. Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor. Wash contaminated clothing before reuse.

Storage

Store in a closed container. Keep container tightly closed. Store in a well-ventilated place. Store in a dry place. Store locked up.

Disposal

Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Other hazards which do not result in GHS classification

None.

3. Composition/information on ingredients

Substances

Chemical Identity	Common name and synonyms	CAS number	Content in percent (%)*
Sodium hydroxide		1310-73-2	>=48 - <=52%
Water		7732-18-5	>=48 - <=52%
Sodium Chloride		7647-14-5	>=0 - <=5%

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Composition Comments:

The components are not hazardous or are below required disclosure limits.

4. First-aid measures

General information:

CAUTION! First aid personnel must be aware of own risk during rescue!

Ingestion:

Do NOT induce vomiting. Never give liquid to an unconscious person. Get medical attention immediately.

Inhalation:

Move to fresh air. If breathing is difficult, give oxygen. Perform artificial respiration if breathing has stopped. Get medical attention immediately.

Skin Contact:

Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Eye contact:

If in eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor.

Most important symptoms/effects, acute and delayed

Symptoms:

No data available.

Indication of immediate medical attention and special treatment needed

Treatment:

No data available.

5. Fire-fighting measures

General Fire Hazards: Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: Use: Powder. In case of fire in the surroundings: all extinguishing agents allowed.

Unsuitable extinguishing media: Avoid water in straight hose stream; will scatter and spread fire.

Specific hazards arising from the chemical: Fire or excessive heat may produce hazardous decomposition products. Heat may cause the containers to explode.

Special protective equipment and precautions for firefighters

Special fire fighting procedures: No data available.

Special protective equipment for fire-fighters: Avoid breathing fire vapors. Avoid water in straight hose stream; will scatter and spread fire. Move container from fire area if it can be done without risk.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Use personal protective equipment. Keep unauthorized personnel away.

Methods and material for containment and cleaning up: Do not touch or walk through spilled material. Absorb spillage with non-combustible, absorbent material. Dike for later disposal.

7. Handling and storage

Precautions for safe handling: Use personal protective equipment as required. Use only with adequate ventilation. Container must be kept tightly closed.

Conditions for safe storage, including any incompatibilities: Keep container tightly closed. Store in appropriate chemical storage area. Keep in a cool, well-ventilated place. Store in corrosive resistant container with a resistant inner liner.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	type	Exposure Limit Values	Source
Sodium hydroxide	Ceiling	2 mg/m ³	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
Sodium hydroxide - Particulate.	ST ESL	20 µg/m ³	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (02 2013)
	AN ESL	2 µg/m ³	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (02 2013)
Sodium hydroxide	Ceiling	2 mg/m ³	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (02 2012)
	Ceiling	2 mg/m ³	US. ACGIH Threshold Limit Values (03 2016)
	Ceil_Tim e	2 mg/m ³	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
	PEL	2 mg/m ³	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (03 2016)
	Ceiling	2 mg/m ³	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)

Appropriate Engineering Controls

Adequate ventilation should be provided so that exposure limits are not exceeded. Eye washes and showers for emergency use.

Individual protection measures, such as personal protective equipment

General information:

Use personal protective equipment as required. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned. Practice good housekeeping.

Eye/face protection:

Use personal protective equipment as required. Wear goggles/face shield.

Skin Protection

Hand Protection:

Chemical resistant gloves.

Other:

Chemical resistant clothing

Respiratory Protection: In case of inadequate ventilation use suitable respirator.
Hygiene measures: When using do not eat, drink or smoke. Wash thoroughly after handling.
Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking.
Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned.

9. Physical and chemical properties

Physical state:	liquid
Form:	liquid
Color:	Colorless
Odor:	Odorless
Odor threshold:	No data available.
pH:	14
Melting point/freezing point:	12 °C 54 °F
Initial boiling point and boiling range:	105 - 140 °C
Flash Point:	No data available.
Evaporation rate:	No data available.
Flammability (solid, gas):	No data available.
Upper/lower limit on flammability or explosive limits	
Flammability limit - upper (%):	No data available.
Flammability limit - lower (%):	No data available.
Explosive limit - upper (%):	No data available.
Explosive limit - lower (%):	No data available.
Vapor pressure:	1.333 hPa
Vapor density:	No data available.
Relative density:	1.5258
Solubility(ies)	
Solubility in water:	No data available.
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.
Auto-ignition temperature:	No data available.
Decomposition temperature:	No data available.

Viscosity: No data available.

10. Stability and reactivity

Reactivity:	No data available.
Chemical Stability:	Material is stable under normal conditions.
Possibility of hazardous reactions:	This product may generate hydrogen gas. Keep away from ignition source. Empty container after use should be stored in separate area, and be disposed after degassing completely.
Conditions to avoid:	No data available.
Incompatible Materials:	Avoid contact with acids and oxidizing substances.
Hazardous Decomposition Products:	This product may generate hydrogen gas. Keep away from ignition source. Empty container after use should be stored in separate area, and be disposed after degassing completely.

11. Toxicological information

Symptoms related to the physical, chemical and toxicological characteristics

Ingestion:	No data available.
Inhalation:	No data available.
Skin Contact:	No data available.
Eye contact:	No data available.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral

Product: ATEmix (): 3,000 mg/kg

Dermal

Product: Not classified for acute toxicity based on available data.

Inhalation

Product: No data available.

Specified substance(s):

Sodium Chloride LC50 (Rat,) : > 42 mg/l 2 = reliable with restrictions LC50 (Rat, 1 h): > 42 mg/l 2 = reliable with restrictions

Repeated dose toxicity

Product: No data available.

Skin Corrosion/Irritation

Product: Causes skin burns.

Serious Eye Damage/Eye Irritation

Product: Causes serious eye damage. Causes severe eye burns.

Respiratory or Skin Sensitization

Product: No data available.

Carcinogenicity

Product: No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified

US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogenic components identified

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):

No carcinogenic components identified

Germ Cell Mutagenicity

In vitro

Product: No data available.

In vivo

Product: No data available.

Reproductive toxicity

Product: No data available.

Specific Target Organ Toxicity - Single Exposure

Product: No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

Aspiration Hazard

Product: No data available.

Other effects: No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: LC50 (Bluegill Sunfish, 48 h): 1,294.6 mg/l

Aquatic Invertebrates

Product: No data available.

Specified substance(s):

Sodium hydroxide
EC50 (Water flea (Ceriodaphnia dubia), 48 h): 34.59 - 47.13 mg/l
Intoxication LC50 (Cockle (Cerastoderma edule), 48 h): 330 - 1,000 mg/l
Mortality LC50 (Common shrimp, sand shrimp (Crangon crangon), 48 h): 33 - 100 mg/l Mortality

Sodium Chloride LC50 (Tubificid worm, Oligochaete (Limnodrilus hoffmeisteri), 261 h): 5,800 mg/l Mortality LC50 (Water flea (Ceriodaphnia dubia), 7 d): < 330 mg/l Mortality LC50 (Pond snail, pneumonate snail (Physa heterostrophia), 24 h): > 5,600 mg/l Mortality EC50 (Tubificid worm (Tubifex tubifex), 24 h): 1,250 mg/l Intoxication LC50 (Pond snail, pneumonate snail (Physa heterostrophia), 96 h): 4,100 mg/l Mortality

Chronic hazards to the aquatic environment:

Fish

Product: No data available.

Aquatic Invertebrates

Product: No data available.

Toxicity to Aquatic Plants

Product: No data available.

Persistence and Degradability

Biodegradation

Product: No data available.

BOD/COD Ratio

Product: No data available.

Bioaccumulative Potential

Bioconcentration Factor (BCF)

Product: No data available.

Partition Coefficient n-octanol / water (log Kow)

Product: No data available.

Mobility in Soil: No data available.

Known or predicted distribution to environmental compartments

Sodium hydroxide No data available.

Water No data available.

Sodium Chloride No data available.

Known or predicted distribution to environmental compartments

Sodium hydroxide No data available.

Sodium Chloride No data available.

13. Disposal considerations

General information: Dispose of waste and residues in accordance with local authority requirements.

Disposal instructions: Discharge, treatment, or disposal may be subject to national, state, or local laws.

Contaminated Packaging: Since emptied containers retain product residue, follow label warnings

even after container is emptied.

14. Transport information

DOT

UN Number:	UN 1824
UN Proper Shipping Name:	Sodium hydroxide solution
Transport Hazard Class(es)	
Class:	8
Label(s):	8
Packing Group:	II
Marine Pollutant:	Not regulated.
Special precautions for user:	—

IMDG

UN Number:	UN 1824
UN Proper Shipping Name:	SODIUM HYDROXIDE SOLUTION
Transport Hazard Class(es)	
Class:	8
Label(s):	8
EmS No.:	F-A, S-B
Packing Group:	II
Marine Pollutant:	Not regulated.
Special precautions for user:	—

IATA

UN Number:	UN 1824
Proper Shipping Name:	Sodium hydroxide solution
Transport Hazard Class(es):	
Class:	8
Label(s):	8
Packing Group:	II
Environmental Hazards	Not regulated.
Special precautions for user:	—
Other information	
Passenger and cargo aircraft:	Allowed.
Cargo aircraft only:	Allowed.

15. Regulatory information

US Federal RegulationsUS. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

Sodium hydroxide Reportable quantity: 1000 lbs.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

☐ Acute (Immediate) ☐ Chronic (Delayed) ☐ Fire ☐ Reactive ☐ Pressure Generating

SARA 302 Extremely Hazardous Substance

None present or none present in regulated quantities.

SARA 304 Emergency Release Notification

Chemical Identity	RQ
Sodium hydroxide	1000 lbs.

SARA 311/312 Hazardous Chemical

Chemical Identity	Threshold Planning Quantity
Sodium hydroxide	500 lbs
Water	500 lbs
Sodium Chloride	500 lbs

SARA 313 (TRI Reporting)

None present or none present in regulated quantities.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

Sodium hydroxide Reportable quantity: 1000 lbs.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

None present or none present in regulated quantities.

US State Regulations

US. California Proposition 65

No ingredient regulated by CA Prop 65 present.

US. New Jersey Worker and Community Right-to-Know Act

Sodium hydroxide Listed

US. Massachusetts RTK - Substance List

Sodium hydroxide Listed

US. Pennsylvania RTK - Hazardous Substances

Sodium hydroxide Listed

US. Rhode Island RTK

Sodium hydroxide Listed

Inventory Status: EINECS, ELINCS or NLP:	On or in compliance with the inventory
Canada NDSL Inventory:	Not in compliance with the inventory.
Philippines PICCS:	On or in compliance with the inventory
US TSCA Inventory:	On or in compliance with the inventory
New Zealand Inventory of Chemicals:	On or in compliance with the inventory
Japan ISHL Listing:	Not in compliance with the inventory.
Japan Pharmacopoeia Listing:	Not in compliance with the inventory.
Australia AICS:	On or in compliance with the inventory
Canada DSL Inventory List:	On or in compliance with the inventory
Japan (ENCS) List:	On or in compliance with the inventory
China Inv. Existing Chemical Substances:	On or in compliance with the inventory
Korea Existing Chemicals Inv. (KECI):	On or in compliance with the inventory
Mexico INSQ:	On or in compliance with the inventory
Ontario Inventory:	Not in compliance with the inventory.
Taiwan Chemical Substance Inventory:	Not in compliance with the inventory.

16. Other information, including date of preparation or last revision

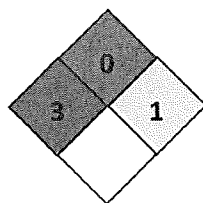
HMIS Hazard ID

Health	*	3
Flammability		0
Physical Hazards		1
PERSONAL PROTECTION		B

B - Safety Glasses & Gloves

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible; *Chronic health effect

NFPA Hazard ID



Dark Gray	Flammability
Medium Gray	Health
Light Gray	Reactivity
White	Special hazard.

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible

Issue Date: 06/06/2017
Revision Date: No data available.
Version #: 1.0
Further Information: No data available.



Univar
 3075 Highland Pkwy STE 200
 Downers Grove, IL 60515
 425-889-3400

SAFETY DATA SHEET

1. Identification

Product identifier: - CAUSTIC SODA 25 - 28%

Other means of identification

Synonyms: Sodium Hydroxide
CAS NUMBERS: 1310-73-2
SDS number: 000100000085

Recommended use and restriction on use

Recommended use: Reserved for industrial and professional use.

Restrictions on use: Not known.

Manufacturer/Importer/Supplier/Distributor Information

Univar

3075 Highland Pkwy STE 200

Downers Grove, IL 60515

425-889-3400

Emergency telephone number: For emergency assistance Involving chemicals

call CHEMTREC day or night at: 1-800-424-9300. CHEMTREC INTERNATIONAL Tel# 703-527-3887

2. Hazard(s) identification

Hazard Classification

Health Hazards

Skin Corrosion/Irritation Category 1A

Serious Eye Damage/Eye Irritation Category 1

Environmental Hazards Acute Category 3

hazards to the aquatic environment

Label Elements

Hazard Symbol



Signal Word	Danger
Hazard Statement	Causes severe skin burns and eye damage. Causes serious eye damage. Harmful to aquatic life.
Precautionary Statements	
Prevention	Do not breathe dust or mists. Wash thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Avoid release to the environment.
Response	IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If swallowed: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor. Wash contaminated clothing before reuse.
Storage	Store locked up.
Disposal	Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product

characteristics at time of disposal.

Other hazards which do not
result in GHS classification

None.

3. Composition/information on ingredients

Substances

Chemical Identity	Common name and synonyms	CAS number	Content in percent (%)*
Sodium hydroxide		1310-73-2	$\geq 25 - \leq 28\%$
Water		7732-18-5	$\geq 72 - \leq 75\%$

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Composition Comments:

The components are not hazardous or are below required disclosure limits.

4. First-aid measures

General information:

CAUTION! First aid personnel must be aware of own risk during rescue!

Ingestion:

Call a physician or poison control center immediately. Rinse mouth. Never give liquid to an unconscious person. Do not induce vomiting without advice from poison control center.

Inhalation:

Call a physician or poison control center immediately. If breathing stops, provide artificial respiration. Move to fresh air. If breathing is difficult, give oxygen.

Skin Contact:

Call a physician or poison control center immediately. Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Destroy or thoroughly clean contaminated shoes.

Eye contact:

Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Call a physician or poison control center immediately.

Most important symptoms/effects, acute and delayed

Symptoms:

No data available.

Indication of immediate medical attention and special treatment needed

Treatment:

Symptoms may be delayed.

5. Fire-fighting measures

General Fire Hazards: No unusual fire or explosion hazards noted.
Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: Use: Powder. In case of fire in the surroundings: all extinguishing agents allowed.

Unsuitable extinguishing media: No data available.

Specific hazards arising from the chemical: During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters

Special fire fighting procedures: No data available.

Special protective equipment for fire-fighters: Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Use personal protective equipment. Keep unauthorized personnel away. See Section 8 of the SDS for Personal Protective Equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away.

Methods and material for containment and cleaning up: Absorb spillage with non-combustible, absorbent material. Dike for later disposal.

Notification Procedures: Dike for later disposal. Prevent entry into waterways, sewer, basements or confined areas. Stop the flow of material, if this is without risk.

Environmental Precautions: Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Do not contaminate water sources or sewer.

7. Handling and storage

Precautions for safe handling: Do not get in eyes. Wash hands thoroughly after handling. Do not get in eyes, on skin, on clothing. Use personal protective equipment as required.

Conditions for safe storage, including any incompatibilities: Store locked up.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values	Source
Sodium hydroxide	Ceiling	2 mg/m ³	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
Sodium hydroxide - Particulate.	ST ESL	20 µg/m ³	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (02 2013)
	AN ESL	2 µg/m ³	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (02 2013)
Sodium hydroxide	Ceiling	2 mg/m ³	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (02 2012)
	Ceiling	2 mg/m ³	US. ACGIH Threshold Limit Values (03 2016)
	Ceil_Time	2 mg/m ³	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
	PEL	2 mg/m ³	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (03 2016)
	Ceiling	2 mg/m ³	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)

Appropriate Engineering Controls

No data available.

Individual protection measures, such as personal protective equipment

General information:	Use personal protective equipment as required. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned. Practice good housekeeping. Provide easy access to water supply and eye wash facilities. Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. If exposure limits have not been established, maintain airborne levels to an acceptable level.
Eye/face protection:	Use personal protective equipment as required. Wear goggles/face shield. Wear a full-face respirator, if needed. Wear safety glasses with side shields (or goggles) and a face shield.
Skin Protection	
Hand Protection:	No data available.
Other:	Wear chemical-resistant gloves, footwear, and protective clothing appropriate for the risk of exposure. Contact health and safety professional or manufacturer for specific information.
Respiratory Protection:	In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor.
Hygiene measures:	Do not get in eyes. Observe good industrial hygiene practices. Wash contaminated clothing before reuse. Do not get this material in contact with skin. Wash hands before breaks and immediately after handling the product.

9. Physical and chemical properties

Physical state:	liquid
Form:	No data available.
Color:	Colorless
Odor:	Odorless
Odor threshold:	No data available.
pH:	14
Melting point/freezing point:	-18 - 0 °C 0 - 32 °F
Initial boiling point and boiling range:	115 °C
SDS_US - 000100000085	

Flash Point:	No data available.
Evaporation rate:	No data available.
Flammability (solid, gas):	No data available.
Upper/lower limit on flammability or explosive limits	
Flammability limit - upper (%):	No data available.
Flammability limit - lower (%):	No data available.
Explosive limit - upper (%):	No data available.
Explosive limit - lower (%):	No data available.
Vapor pressure:	No data available.
Vapor density:	No data available.
Relative density:	1.236 - 1.309 (20 °C)
Solubility(ies)	
Solubility in water:	Miscible with water.
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.
Auto-ignition temperature:	No data available.
Decomposition temperature:	No data available.
Viscosity:	No data available.

10. Stability and reactivity

Reactivity:	No data available.
Chemical Stability:	Material is stable under normal conditions.
Possibility of hazardous reactions:	No data available.
Conditions to avoid:	Avoid heat or contamination.
Incompatible Materials:	No data available.
Hazardous Decomposition Products:	No data available.

11. Toxicological information

Symptoms related to the physical, chemical and toxicological characteristics

Ingestion:	No data available.
Inhalation:	No data available.
Skin Contact:	No data available.

Eye contact: No data available.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral

Product: No data available.

Dermal

Product: No data available.

Inhalation

Product: No data available.

Repeated dose toxicity

Product: No data available.

Skin Corrosion/Irritation

Product: No data available.

Serious Eye Damage/Eye Irritation

Product: No data available.

Respiratory or Skin Sensitization

Product: No data available.

Carcinogenicity

Product: No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:
No carcinogenic components identified

US. National Toxicology Program (NTP) Report on Carcinogens:
No carcinogenic components identified

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):
No carcinogenic components identified

Germ Cell Mutagenicity

In vitro

Product: No data available.

In vivo

Product: No data available.

Reproductive toxicity

Product: No data available.

Specific Target Organ Toxicity - Single Exposure

Product: No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

Aspiration Hazard

Product: No data available.

Other effects: No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: No data available.

Specified substance(s):

Sodium hydroxide LC 50 (Western mosquitofish (*Gambusia affinis*), 24 h): 125 mg/l Mortality
LC 50 (Guppy (*Poecilia reticulata*), 24 h): 145 mg/l Mortality LC 50 (Western mosquitofish (*Gambusia affinis*), 48 h): 125 mg/l Mortality LC 50 (Goldfish (*Carassius auratus*), 24 h): 160 mg/l Mortality LC 50 (Western mosquitofish (*Gambusia affinis*), 96 h): 125 mg/l Mortality

Aquatic Invertebrates

Product: No data available.

Specified substance(s):

Sodium hydroxide EC 50 (Water flea (*Ceriodaphnia dubia*), 48 h): 34.59 - 47.13 mg/l
Intoxication LC 50 (Cockle (*Cerastoderma edule*), 48 h): 330 - 1,000 mg/l
Mortality LC 50 (Common shrimp, sand shrimp (*Crangon crangon*), 48 h): 33 - 100 mg/l Mortality

Chronic hazards to the aquatic environment:

Fish

Product: No data available.

Aquatic Invertebrates

Product: No data available.

Toxicity to Aquatic Plants

Product: No data available.

Persistence and Degradability

Biodegradation

Product: No data available.

BOD/COD Ratio

Product: No data available.

Bioaccumulative potential

Bioconcentration Factor (BCF)

Product: No data available.

Partition Coefficient n-octanol / water (log K_{ow})

Product: No data available.

Mobility in soil:

No data available.

Known or predicted distribution to environmental compartments

Sodium hydroxide	No data available.
Water	No data available.
Known or predicted distribution to environmental compartments	
Sodium hydroxide	No data available.

13. Disposal considerations

Disposal instructions:	Discharge, treatment, or disposal may be subject to national, state, or local laws.
Contaminated Packaging:	Since emptied containers retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT

UN Number:	UN 1824
UN Proper Shipping Name:	Sodium hydroxide solution
Transport Hazard Class(es)	
Class:	8
Label(s):	8
Packing Group:	II
Marine Pollutant:	Not regulated.
Special precautions for user:	—

IMDG

UN Number:	UN 1824
UN Proper Shipping Name:	SODIUM HYDROXIDE SOLUTION
Transport Hazard Class(es)	
Class:	8
Label(s):	8
EmS No.:	F-A, S-B
Packing Group:	II
Marine Pollutant:	Not regulated.

Special precautions for user: —

IATA

UN Number: UN 1824
Proper Shipping Name: Sodium hydroxide solution
Transport Hazard Class(es):
Class: 8
Label(s): 8
Packing Group: II
Environmental Hazards: Not regulated.
Special precautions for user: —
Other information:
Passenger and cargo aircraft: Allowed.
Cargo aircraft only: Allowed.

15. Regulatory information

US Federal RegulationsUS. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

Sodium hydroxide Reportable quantity: 1000 lbs.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

☒ Acute (Immediate) ☐ Chronic (Delayed) ☐ Fire ☐ Reactive ☐ Pressure Generating

SARA 302 Extremely Hazardous Substance

None present or none present in regulated quantities.

SARA 304 Emergency Release Notification

Chemical Identity	RQ
Sodium hydroxide	1000 lbs.

SARA 311/312 Hazardous Chemical

Chemical Identity	Threshold Planning Quantity
Water	500 lbs
Sodium hydroxide	500 lbs

SARA 313 (TRI Reporting)

None present or none present in regulated quantities.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

Sodium hydroxide Reportable quantity: 1000 lbs.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

None present or none present in regulated quantities.

US State Regulations

US. California Proposition 65

No ingredient regulated by CA Prop 65 present.

US. New Jersey Worker and Community Right-to-Know Act

Sodium hydroxide Listed

US. Massachusetts RTK - Substance List

Sodium hydroxide Listed

US. Pennsylvania RTK - Hazardous Substances

Sodium hydroxide Listed

US. Rhode Island RTK

Sodium hydroxide Listed

Inventory Status: Australia AICS:	On or in compliance with the inventory
Canada DSL Inventory List:	On or in compliance with the inventory
EINECS, ELINCS or NLP:	On or in compliance with the inventory
Japan (ENCS) List:	On or in compliance with the inventory
China Inv. Existing Chemical Substances:	On or in compliance with the inventory
Korea Existing Chemicals Inv. (KECI):	On or in compliance with the inventory
Philippines PICCS:	On or in compliance with the inventory
US TSCA Inventory:	On or in compliance with the inventory
New Zealand Inventory of Chemicals:	On or in compliance with the inventory
Mexico INSQ:	On or in compliance with the inventory

16. Other information, including date of preparation or last revision

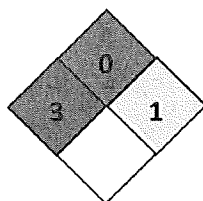
HMIS Hazard ID

Health	*	3
Flammability		0
Physical Hazards		1
PERSONAL PROTECTION		B

B - Safety Glasses & Gloves

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible; *Chronic health effect

NFPA Hazard ID



Dark Gray	Flammability
Medium Gray	Health
Light Gray	Reactivity
White	Special hazard.

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible

Issue Date:	03/15/2018
Revision Date:	No data available.
Version #:	1.1
Further Information:	No data available.



Univar
3075 Highland Pkwy STE 200
Downers Grove, IL 60515
425-889-3400

SAFETY DATA SHEET

1. Identification

Product identifier: CAUSTIC SODA 30%

Other means of identification

Synonyms: Sodium Hydroxide

SDS number: 000100000086

Recommended use and restriction on use

Recommended use: Not available.

Restrictions on use: Not known.

Emergency telephone number: For emergency assistance Involving chemicals

call CHEMTREC day or night at: 1-800-424-9300. CHEMTREC INTERNATIONAL Tel# 703-527-3887

2. Hazard(s) identification

Hazard classification

Health hazards

Skin corrosion/irritation Category 1A

Serious eye damage/eye irritation Category 1

Label elements

Hazard symbol



Signal word

Danger

Hazard statement	Corrosive. Harmful if swallowed. Causes severe skin burns and eye damage.
Precautionary statement	
Prevention	Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Do not breathe dust or mists. Wear protective gloves/protective clothing/eye protection/face protection.
Response	IF INHALED: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. If swallowed: Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor. Specific treatment (see this label). Wash contaminated clothing before reuse.
Storage	Store in a closed container. Keep container tightly closed. Store in a well-ventilated place. Store in a dry place. Store locked up.
Disposal	Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.
Other hazards which do not result in GHS classification	None.

3. Composition/information on ingredients

Substances

Chemical identity	Common name and synonyms	CAS number	Content in percent (%)*
Sodium hydroxide		1310-73-2	30%
Water		7732-18-5	70%

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

Composition comments: The components are not hazardous or are below required disclosure limits.

4. First-aid measures

General information: CAUTION! First aid personnel must be aware of own risk during rescue!

Ingestion: Do NOT induce vomiting. Never give liquid to an unconscious person. Get medical attention immediately.

Inhalation: Move to fresh air. If breathing is difficult, give oxygen. Perform artificial respiration if breathing has stopped. Get medical attention immediately.

Skin contact: Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

Eye contact: If in eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor.

Most important symptoms/effects, acute and delayed

Symptoms: No data available.

Indication of immediate medical attention and special treatment needed

Treatment: No data available.

5. Fire-fighting measures

General fire hazards: No data available.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media: Use: Powder. In case of fire in the surroundings: all extinguishing agents allowed.

Unsuitable extinguishing media: No data available.

Specific hazards arising from the chemical: No data available.

Special protective equipment and precautions for firefighters

Special fire fighting procedures: No data available.

Special protective equipment for fire-fighters: No data available.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Use personal protective equipment. Keep unauthorized personnel away.

Methods and material for containment and cleaning up: Absorb spillage with non-combustible, absorbent material. Dike for later disposal.

7. Handling and storage

Precautions for safe handling: Use personal protective equipment as required. Use only with adequate ventilation. Container must be kept tightly closed.

Conditions for safe storage, including any incompatibilities: No data available.

8. Exposure controls/personal protection

Control parameters
Occupational exposure limits

None of the components have assigned exposure limits.

Appropriate engineering controls
No data available.

Individual protection measures, such as personal protective equipment

General information: Use personal protective equipment as required. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned. Practice good housekeeping.

Eye/face protection: Use personal protective equipment as required. Wear goggles/face shield.

Skin protection

Hand protection: No data available.

Other: No data available.

Respiratory protection: No data available.

Hygiene measures: No data available.

9. Physical and chemical properties

Physical state:	Liquid
Form:	No data available.
Color:	No data available.
Odor:	No data available.
Odor threshold:	No data available.
pH:	14
Melting point/freezing point:	No data available.
Initial boiling point and boiling range:	100 °C
Flash Point:	No data available.
Evaporation rate:	No data available.
Flammability (solid, gas):	No data available.
Upper/lower limit on flammability or explosive limits	
Flammability limit - upper (%):	No data available.
Flammability limit - lower (%):	No data available.
Explosive limit - upper (%):	No data available.
Explosive limit - lower (%):	No data available.
Vapor pressure:	No data available.
Vapor density:	No data available.
Relative density:	No data available.
Solubility(ies)	
Solubility in water:	No data available.
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.
Auto-ignition temperature:	No data available.
Decomposition temperature:	No data available.
Viscosity:	No data available.

10. Stability and reactivity

Reactivity:	No data available.
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Chemical stability: No data available.
Possibility of hazardous reactions: No data available.
Conditions to avoid: No data available.
Incompatible materials: No data available.
Hazardous decomposition products: No data available.

11. Toxicological information

Symptoms related to the physical, chemical and toxicological characteristics

Ingestion: No data available.
Inhalation: No data available.
Skin contact: No data available.
Eye contact: No data available.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral

Product: No data available.

Specified substance(s):

Sodium hydroxide LD 50 (Rabbit): 325 mg/kg (, No) 3 (not reliable)

Dermal

Product: No data available.

Inhalation

Product: No data available.

Repeated dose toxicity

Product: No data available.

Skin corrosion/irritation

Product: No data available.

Serious eye damage/eye irritation

Product: No data available.

Respiratory or skin sensitization

Product: No data available.

Carcinogenicity

Product: No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified

US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogenic components identified

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):

No carcinogenic components identified

Germ cell mutagenicity

In vitro

Product: No data available.

In vivo

Product: No data available.

Reproductive toxicity

Product: No data available.

Specific target organ toxicity - single exposure

Product: No data available.

Specific target organ toxicity - repeated exposure

Product: No data available.

Aspiration hazard

Product: No data available.

Other effects: No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: No data available.

Specified substance(s):

Sodium hydroxide LC 50 (Western mosquitofish (*Gambusia affinis*), 24 h): 125 mg/l Mortality
LC 50 (Guppy (*Poecilia reticulata*), 24 h): 145 mg/l Mortality LC 50 (Goldfish
(*Carassius auratus*), 24 h): 160 mg/l Mortality LC 50 (Bony fish superclass
(*Osteichthyes*), 48 h): 33 - 100 mg/l Mortality LC 50 (Western mosquitofish
(*Gambusia affinis*), 48 h): 125 mg/l Mortality

Aquatic invertebrates

Product: No data available.

Specified substance(s):

Sodium hydroxide EC 50 (Water flea (*Ceriodaphnia dubia*), 48 h): 34.59 - 47.13 mg/l
Intoxication LC 50 (Common shrimp, sand shrimp (*Crangon crangon*), 48 h):
33 - 100 mg/l Mortality LC 50 (Cockle (*Cerastoderma edule*), 48 h): 330 -

	1,000 mg/l Mortality
Chronic hazards to the aquatic environment:	
Fish	
Product:	No data available.
Aquatic invertebrates	
Product:	No data available.
Toxicity to Aquatic Plants	
Product:	No data available.
Persistence and degradability	
Biodegradation	
Product:	No data available.
BOD/COD ratio	
Product:	No data available.
Bioaccumulative potential	
Bioconcentration factor (BCF)	
Product:	No data available.
Partition coefficient n-octanol / water (log Kow)	
Product:	No data available.
Mobility in soil:	No data available.
Known or predicted distribution to environmental compartments	
Sodium hydroxide	No data available.
Water	No data available.
Known or predicted distribution to environmental compartments	
Water	No data available.
	No data available.

13. Disposal considerations

Disposal instructions:	No data available.
Contaminated packaging:	No data available.

14. Transport information

DOT

UN number:	UN 1824
UN proper shipping name:	Sodium hydroxide solution
Transport hazard class(es)	
Class:	8
Label(s):	8
Packing group:	II
Marine Pollutant:	Not regulated.

Special precautions for user: —

IMDG

UN number: UN 1824
UN proper shipping name: SODIUM HYDROXIDE SOLUTION
Transport hazard class(es)
Class: 8
Label(s): 8
EmS No.: F-A, S-B
Packing group: II
Marine Pollutant: Not regulated.
Special precautions for user: —

IATA

UN number: UN 1824
Proper Shipping Name: Sodium hydroxide solution
Transport hazard class(es):
Class: 8
Label(s): 8
Packing group: II
Environmental hazards: Not regulated.
Special precautions for user: —
Other information
Passenger and cargo aircraft: Allowed.
Cargo aircraft only: Allowed.

15. Regulatory information

US federal regulationsUS. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

None present or none present in regulated quantities.

Superfund amendments and reauthorization act of 1986 (SARA)

Hazard categories

Not listed.

SARA 302 Extremely hazardous substance

None present or none present in regulated quantities.

SARA 304 Emergency release notification

None present or none present in regulated quantities.

SARA 311/312 Hazardous chemical

Chemical identity	Threshold Planning Quantity
--------------------------	------------------------------------

SARA 313 (TRI reporting)

None present or none present in regulated quantities.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

None present or none present in regulated quantities.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

None present or none present in regulated quantities.

US state regulations

US. California Proposition 65

No ingredient regulated by CA Prop 65 present.

US. New Jersey Worker and Community Right-to-Know Act

No ingredient regulated by NJ Right-to-Know Law present.

US. Massachusetts RTK - Substance List

No ingredient regulated by MA Right-to-Know Law present.

US. Pennsylvania RTK - Hazardous Substances

No ingredient regulated by PA Right-to-Know Law present.

US. Rhode Island RTK

No ingredient regulated by RI Right-to-Know Law present.

Inventory Status: Australia AICS:	Not in compliance with the inventory.
Canada DSL Inventory List:	Not in compliance with the inventory.
EU EINECS List:	Not in compliance with the inventory.
EU ELINCS List:	Not in compliance with the inventory.
Japan (ENCS) List:	Not in compliance with the inventory.
EU No Longer Polymers List:	Not in compliance with the inventory.
China Inv. Existing Chemical Substances:	Not in compliance with the inventory.
Korea Existing Chemicals Inv. (KECI):	Not in compliance with the inventory.
Canada NDSL Inventory:	Not in compliance with the inventory.
Philippines PICCS:	Not in compliance with the inventory.
US TSCA Inventory:	Not in compliance with the inventory.
New Zealand Inventory of Chemicals:	Not in compliance with the inventory.
Japan ISHL Listing:	Not in compliance with the inventory.
Japan Pharmacopoeia Listing:	Not in compliance with the inventory.

16. Other information, including date of preparation or last revision

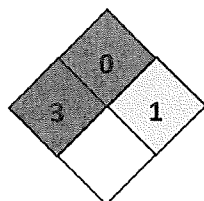
HMIS Hazard ID

Health	3
Flammability	0
Physical hazards	0
PERSONAL PROTECTION	B

B - Safety Glasses & Gloves

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; *Chronic health effect

NFPA Hazard ID



Flammability
Health
Reactivity
Special hazard.

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe

Issue date: 04/29/2015
Revision date: No data available.
Version #: 1.2
Further information: No data available.



Univar
3075 Highland Pkwy STE 200
Downers Grove, IL 60515
425-889-3400

SAFETY DATA SHEET

1. Identification

Product identifier: CAUSTIC SODA 20%

Other means of identification

Synonyms: Sodium Hydroxide

SDS number: 000100000083

Recommended use and restriction on use

Recommended use: Not available.

Restrictions on use: Not known.

Emergency telephone number: For emergency assistance Involving chemicals

call CHEMTREC day or night at: 1-800-424-9300. CHEMTREC INTERNATIONAL Tel# 703-527-3887

2. Hazard(s) identification

Hazard classification

Health hazards

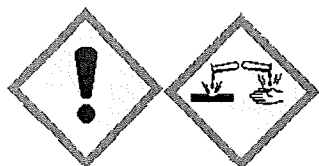
Acute toxicity (Oral) Category 4

Skin corrosion/irritation Category 1A

Serious eye damage/eye irritation Category 1

Label elements

Hazard symbol



Signal word	Danger
Hazard statement	Corrosive. Harmful if swallowed. Causes severe skin burns and eye damage.
Precautionary statement	
Prevention	Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Do not breathe dust or mists. Wear protective gloves/protective clothing/eye protection/face protection.
Response	IF INHALED: Remove person to fresh air and keep comfortable for breathing. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. IF SWALLOWED: Call a POISON CENTER/doctor/ if you feel unwell. Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER/doctor. Specific treatment (see this label). Wash contaminated clothing before reuse.
Storage	Store in a closed container. Keep container tightly closed. Store in a well-ventilated place. Store in a dry place. Store locked up.
Disposal	Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.
Other hazards which do not result in GHS classification	None.

3. Composition/information on ingredients

Substances

Chemical identity	Common name and synonyms	CAS number	Content in percent (%)*
Sodium hydroxide		1310-73-2	20%
Water		7732-18-5	80%

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

General information:	CAUTION! First aid personnel must be aware of own risk during rescue!
Ingestion:	Do NOT induce vomiting. Never give liquid to an unconscious person. Get medical attention immediately.
Inhalation:	Move to fresh air. If breathing is difficult, give oxygen. Perform artificial respiration if breathing has stopped. Get medical attention immediately.
Skin contact:	Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
Eye contact:	If in eyes, hold eyes open, flood with water for at least 15 minutes and see a doctor.
Most important symptoms/effects, acute and delayed	
Symptoms:	No data available.

Indication of immediate medical attention and special treatment needed

Treatment: No data available.

5. Fire-fighting measures

General fire hazards:	No data available.
Suitable (and unsuitable) extinguishing media	
Suitable extinguishing media:	Use: Powder. In case of fire in the surroundings: all extinguishing agents allowed.
Unsuitable extinguishing media:	No data available.
Specific hazards arising from the chemical:	No data available.
Special protective equipment and precautions for firefighters	

Special fire fighting procedures: No data available.

Special protective equipment for fire-fighters: No data available.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Use personal protective equipment. Keep unauthorized personnel away.

Methods and material for containment and cleaning up: Absorb spillage with non-combustible, absorbent material. Dike for later disposal.

7. Handling and storage

Precautions for safe handling: Use personal protective equipment as required. Use only with adequate ventilation. Container must be kept tightly closed.

Conditions for safe storage, including any incompatibilities: No data available.

8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Chemical identity	Type	Exposure Limit values	Source
Sodium hydroxide	Ceiling	2 mg/m ³	US. ACGIH Threshold Limit Values (03 2013)
	Ceil_Tim e	2 mg/m ³	US. NIOSH: Pocket Guide to Chemical Hazards (2010)
	PEL	2 mg/m ³	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	Ceiling	2 mg/m ³	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	Ceiling	2 mg/m ³	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
Sodium hydroxide - Particulate.	ST ESL	20 µg/m ³	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (02 2013)
	AN ESL	2 µg/m ³	US. Texas. Effects Screening Levels

			(Texas Commission on Environmental Quality) (02 2013)
Sodium hydroxide	Ceiling	2 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (02 2012)

Appropriate engineering controls No data available.

Individual protection measures, such as personal protective equipment

General information: Use personal protective equipment as required. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned. Practice good housekeeping.

Eye/face protection: Use personal protective equipment as required. Wear goggles/face shield.

Skin protection

Hand protection: No data available.

Other: No data available.

Respiratory protection: No data available.

Hygiene measures: No data available.

9. Physical and chemical properties

Physical state: Liquid

Form: No data available.

Color: No data available.

Odor: No data available.

Odor threshold: No data available.

pH: 14

Melting point/freezing point: No data available.

Initial boiling point and boiling range: No data available.

Flash Point: No data available.

Evaporation rate: No data available.

Flammability (solid, gas): No data available.

Upper/lower limit on flammability or explosive limits

Flammability limit - upper (%): No data available.

Flammability limit - lower (%): No data available.

Explosive limit - upper (%):	No data available.
Explosive limit - lower (%):	No data available.
Vapor pressure:	No data available.
Vapor density:	No data available.
Relative density:	No data available.
Solubility(ies)	
Solubility in water:	No data available.
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.
Auto-ignition temperature:	No data available.
Decomposition temperature:	No data available.
Viscosity:	No data available.

10. Stability and reactivity

Reactivity:	No data available.
Chemical stability:	No data available.
Possibility of hazardous reactions:	No data available.
Conditions to avoid:	No data available.
Incompatible materials:	No data available.
Hazardous decomposition products:	No data available.

11. Toxicological information

Symptoms related to the physical, chemical and toxicological characteristics

Ingestion:	No data available.
Inhalation:	No data available.
Skin contact:	No data available.
Eye contact:	No data available.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral

Product:	ATEmix (); 325 mg/kg
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Dermal

Product:	No data available.
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Inhalation

Product:	No data available.
Repeated dose toxicity	
Product:	No data available.
Skin corrosion/irritation	
Product:	No data available.
Serious eye damage/eye irritation	
Product:	No data available.
Respiratory or skin sensitization	
Product:	No data available.
Carcinogenicity	
Product:	No data available.
IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:	
No carcinogenic components identified	
US. National Toxicology Program (NTP) Report on Carcinogens:	
No carcinogenic components identified	
US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):	
No carcinogenic components identified	
Germ cell mutagenicity	
In vitro	
Product:	No data available.
In vivo	
Product:	No data available.
Reproductive toxicity	
Product:	No data available.
Specific target organ toxicity - single exposure	
Product:	No data available.
Specific target organ toxicity - repeated exposure	
Product:	No data available.
Aspiration hazard	
Product:	No data available.
Other effects:	No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish

Product: No data available.

Specified substance(s):

Sodium hydroxide	LC 50 (Western mosquitofish (<i>Gambusia affinis</i>), 24 h): 125 mg/l Mortality LC 50 (Guppy (<i>Poecilia reticulata</i>), 24 h): 145 mg/l Mortality LC 50 (Goldfish (<i>Carassius auratus</i>), 24 h): 160 mg/l Mortality LC 50 (Bony fish superclass (<i>Osteichthyes</i>), 48 h): 33 - 100 mg/l Mortality LC 50 (Western mosquitofish (<i>Gambusia affinis</i>), 48 h): 125 mg/l Mortality
Aquatic invertebrates	
Product:	No data available.
Specified substance(s):	
Sodium hydroxide	EC 50 (Water flea (<i>Ceriodaphnia dubia</i>), 48 h): 34.59 - 47.13 mg/l Intoxication LC 50 (Common shrimp, sand shrimp (<i>Crangon crangon</i>), 48 h): 33 - 100 mg/l Mortality LC 50 (Cockle (<i>Cerastoderma edule</i>), 48 h): 330 - 1,000 mg/l Mortality
Chronic hazards to the aquatic environment:	
Fish	
Product:	No data available.
Aquatic invertebrates	
Product:	No data available.
Toxicity to Aquatic Plants	
Product:	No data available.
Persistence and degradability	
Biodegradation	
Product:	No data available.
BOD/COD ratio	
Product:	No data available.
Bioaccumulative potential	
Bioconcentration factor (BCF)	
Product:	No data available.
Partition coefficient n-octanol / water (log K _{ow})	
Product:	No data available.
Mobility in soil:	No data available.
Known or predicted distribution to environmental compartments	
Sodium hydroxide	No data available.
Water	No data available.
Known or predicted distribution to environmental compartments	
Water	No data available.

13. Disposal considerations

Disposal instructions:	No data available.
Contaminated packaging:	No data available.

14. Transport information

DOT

UN number:	UN 1824
UN proper shipping name:	Sodium hydroxide solution
Transport hazard class(es)	
Class:	8
Label(s):	8
Packing group:	II
Marine Pollutant:	Not regulated.
Special precautions for user:	—

IMDG

UN number:	UN 1824
UN proper shipping name:	SODIUM HYDROXIDE SOLUTION
Transport hazard class(es)	
Class:	8
Label(s):	8
EmS No.:	F-A, S-B
Packing group:	II
Marine Pollutant:	Not regulated.
Special precautions for user:	—

IATA

UN number:	UN 1824
Proper Shipping Name:	Sodium hydroxide solution
Transport hazard class(es):	
Class:	8
Label(s):	8
Packing group:	II
Environmental hazards	Not regulated.
Special precautions for user:	—
Other information	
Passenger and cargo aircraft:	Allowed.
Cargo aircraft only:	Allowed.

15. Regulatory information

US federal regulationsUS. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

Sodium hydroxide Reportable quantity: 1000 lbs.

Superfund amendments and reauthorization act of 1986 (SARA)

Hazard categories

Not listed.

SARA 302 Extremely hazardous substance

None present or none present in regulated quantities.

SARA 304 Emergency release notification

Chemical identity	RQ
Sodium hydroxide	1000 lbs.

SARA 311/312 Hazardous chemical

Chemical identity	Threshold Planning Quantity
Sodium hydroxide	500 lbs

SARA 313 (TRI reporting)

None present or none present in regulated quantities.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

Sodium hydroxide Reportable quantity: 1000 lbs.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

None present or none present in regulated quantities.

US state regulations

US. California Proposition 65

No ingredient regulated by CA Prop 65 present.

US. New Jersey Worker and Community Right-to-Know Act

Sodium hydroxide Listed

US. Massachusetts RTK - Substance List

Sodium hydroxide Listed

US. Pennsylvania RTK - Hazardous Substances

Sodium hydroxide Listed

US. Rhode Island RTK

Sodium hydroxide Listed

Inventory Status: Australia AICS:	Not in compliance with the inventory.
Canada DSL Inventory List:	Not in compliance with the inventory.
EU EINECS List:	On or in compliance with the inventory
EU ELINCS List:	Not in compliance with the inventory.
Japan (ENCS) List:	Not in compliance with the inventory.
EU No Longer Polymers List:	Not in compliance with the inventory.
China Inv. Existing Chemical Substances:	Not in compliance with the inventory.
Korea Existing Chemicals Inv. (KECI):	Not in compliance with the inventory.
Canada NDSL Inventory:	Not in compliance with the inventory.
Philippines PICCS:	Not in compliance with the inventory.
US TSCA Inventory:	On or in compliance with the inventory
New Zealand Inventory of Chemicals:	Not in compliance with the inventory.
Japan ISHL Listing:	Not in compliance with the inventory.
Japan Pharmacopoeia Listing:	Not in compliance with the inventory.

16. Other information, including date of preparation or last revision

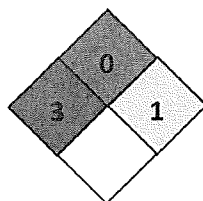
HMIS Hazard ID

Health	*	3
Flammability		0
Physical hazards		1
PERSONAL PROTECTION		B

B - Safety Glasses & Gloves

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; *Chronic health effect

NFPA Hazard ID



	Flammability
	Health
	Reactivity
	Special hazard.

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe

Issue date: 04/28/2015
Revision date: No data available.
Version #: 1.0
Further information: No data available.

NACD Responsible Distribution Process Code of Management Practice

Each member company shall have an active program designed to continuously improve safety and reduce incidents. This Code does not impose upon member companies any obligation to guarantee compliance by third parties, i.e., parties over whom the member companies have no control. This program shall include:

I. Risk Management

- A. Senior management commitment, through policy, communications, and resources, to on-going improvements in chemical distribution safety.
- B. Regular review with suppliers of the hazards of materials.
- C. Identification and implementation of risk reduction measures.

II. Compliance Review and Training

- A. A process for monitoring regulations and industry practices for their application to chemical distribution activities.
- B. A process for implementing applicable regulations and industry practices that apply to chemical distribution activities.
- C. Training for all employees in the implementation of applicable regulations, as well as member company's specific requirements.
- D. A process for review of employee compliance with applicable regulations and member company's specific requirements and review of outside contractor and re-seller compliance with member company's specific requirements.

III. Carrier Selection

- A. A process for selecting carriers to transport chemicals that includes carrier safety and fitness, security, regulatory compliance, and performance review.

IV. Handling and Storage

- A. Procedures for ensuring that containers are appropriate for the chemical being shipped, comply with regulatory requirements, and are free from leaks and visible defects.
- B. Criteria for the cleaning and re-use of transportation equipment and chemical containers, and the proper disposal of cleaning residues.
- C. Procedures for loading and unloading chemicals at the member company's facilities that result in protection of personnel, a reduction in emissions to the environment, and ensures that chemicals are loaded and unloaded into and out of proper storage facilities.
- D. A program for providing manufacturer guidance and information to customers, warehouses, terminals and/or carriers on procedures for loading, unloading, and/or storing chemicals.
- E. A process for selecting owned and contracted facilities and sites for chemical storage or handling that emphasizes safety, fitness and includes reviews.
- F. Documentation of current operating procedures for handling and storing chemicals.
- G. Facility design, construction, maintenance, inspection, and security practices that promote facility integrity, consistent with recognized codes and regulations.
- H. Develop a process for addressing chemical site and chemical transportation security.
- I. Provisions for control of processes and equipment during emergencies resulting from natural events, utility disruptions, and other external conditions.
- J. Procedures to properly label and mark packages and containers.

V. Job Procedures and Training

- A. Identification of the skills and knowledge necessary to perform each job.
- B. Establishment of procedures and work practices for safe operating and maintenance activities.
- C. Training for all personnel to reach and maintain proficiency in safe work practices and the skills and knowledge necessary to perform their job, including confirmation of competence.
- D. Programs designed to assure that personnel in safety critical jobs are fit for duty and are not compromised by external influences, including alcohol and drug abuse.
- E. Outside Contractors: In areas where hazardous materials are present, members shall have a process in place to inform contractors of the known hazards and the emergency action plan.

VI. Waste Management and Conservation Practices

- A. Procedures to ensure that all self-generated waste and empty containers are disposed of in a responsible manner, and in accordance with existing regulations.
- B. A clear commitment by senior management through policy communications, resources, and programs to ongoing waste reductions and pollution prevention at each member facility.
- C. A commitment to institute resource conservation measures.

VII. Emergency Response and Public Preparedness

- A. A process for responding to, reporting on, and investigating chemical distribution incidents and releases involving the member company's chemicals, and implementation of appropriate preventive measures developed from that investigative process.
- B. A system of internal investigation, reporting, appropriate corrective action, and follow-up for each incident and/or near miss that result or could have resulted in chemical incidents or releases.
- C. Procedures for making emergency response information concerning the member company's chemicals available to response agencies.

- D. Communication with state and/or local emergency planning commissions and response organizations on the potential hazards of the member company's chemicals.
- E. Annual review, testing, and assessment of the operability of the member company's written emergency action and fire prevention plan and/or emergency response plan.
- F. Facility tours for first responders to promote emergency preparedness and to provide current knowledge of facility operations.
- G. Coordination of the written facility emergency response plan with the local emergency response team and other facilities. If no community plan exists, the facility should assist with efforts to create one.
- H. Participation in the Local Emergency Planning Committee's process to develop and periodically test the local emergency response plan.

VIII. Community Outreach

- A. Interaction with organizations, associations, government officials and/or the public on behalf of NACD's Responsible Distribution ProcessSM.
- B. Information and updated for employees on the Responsible Distribution ProcessSM to encourage key employees to become involved in community outreach efforts.
- C. Advocacy of responsible public policies and regulations for chemical distribution.

IX. Product Stewardship

Customers

- A. A process to qualify customers as prescribed by governmental regulation.
- B. Member companies should work with customers to foster appropriate dissemination of information on the proper use, handling and disposal of products commensurate with product risk. A member may decide to cease doing business with customers whose practices are clearly inconsistent with the Responsible Distribution ProcessSM.

X. Internal RDP Audits

- A. Member companies shall establish documented procedures for regularly scheduled INTERNAL AUDITS to verify the implementation of policies and procedures supporting the RDP Code of Management Practice. The audits will be used to evaluate the effectiveness of the policies and procedures. Internal Audits shall be done on a yearly basis beginning with successful completion of the Interim Verification Process.
- B. Audits shall be recorded and results brought to the attention of appropriate management personnel who must take timely corrective or preventive action. Annual audit results should be retained until the next Third-party On-Site Verification is completed.

XI. RDP Corrective and Preventive Action

- A. Member companies shall establish a CORRECTIVE AND PREVENTIVE ACTION system for RDP related issues. This system should permit the identification and communication of inadequacies or improvements in each member company's implementation of RDP.
- B. Member companies shall establish and maintain procedures for implementing corrective action and preventive actions arising from internal and external audits or other sources. Any corrective or preventive action taken to resolve the cause or RDP implementation inadequacy shall be appropriate, as determined by member company management, to the magnitude of the cause or inadequacy and commensurate with the risk involved.

XII. RDP Document and Data Control

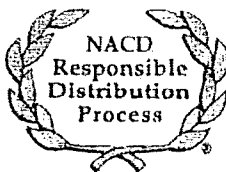
- A. Member companies shall establish and maintain a documented system to control all policies and procedures supporting RDP. In addition, member companies shall maintain a documented system to control the documents and data relating to RDP itself as issued by the National Association of Chemical Distributors (NACD).
- B. Data includes any of the above that is electronically stored and utilized.
- C. These documented procedures shall include provisions for review and approval of any new or revised policies and procedures by the authorized personnel within the member company.
- D. A master list or functionally equivalent document control system identifying the current version of each document shall be established and be readily available to preclude the use of invalid and/or obsolete documents. The system shall ensure that:

Changes to documents and data shall be reviewed and approved by the same function/organization that performed the original review and approval, unless specifically designated otherwise. These functions/organizations shall have access to pertinent background information upon which to base their review and approval. Where practical, the nature of the change shall be identified in the document or appropriate attachments.

NACD Responsible Distribution Process

Guiding Principles

1. To recognize and respond to community concerns about chemicals, their handling, and transportation.
2. To make health, safety, security, and environmental considerations a priority in our planning for all existing and new operations, products, processes, and facilities.
3. To inform emergency response officials, employees, customers, and the public of manufacturer's information on chemical-related health or environmental hazards, and the manufacturer's recommendations on protective measures.
4. To work with customers, in accordance with manufacturer's recommendations, on product stewardship including handling, use, transportation, and disposal of chemical products.
5. To operate our plants and facilities in a manner that protects the health and safety of our employees, the public and the environment.
6. To cooperate in resolving problems created by past handling and disposal of hazardous chemicals.
7. To participate with government and others in creating responsible laws, regulations, and practices to help safeguard the community, workplace, and environment.
8. To promote the principles and practices of Responsible Distribution ProcessSM by sharing experiences and offering assistance to others who produce, handle, use, transport, or dispose of chemicals.



RDP – What Is It?

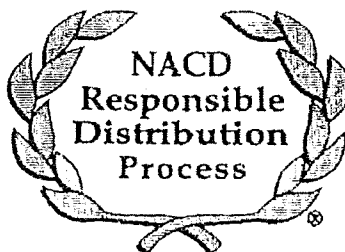
Univar is a member of the National Association of Chemical Distributors. This trade association developed the Responsible Distribution ProcessSM (RDP), which focuses on the responsible management and distribution of chemicals.

RDP emphasizes continual improvement in the health, safety, security, and environmental performance of all NACD member companies. This includes a commitment to comply with environmental, health and safety regulations; providing critical product safety information to employees, contractors and customers; while working with local communities and neighbors to respond to their needs. RDP consists of a set of Guiding Principles and the Code of Management Practice. This Code includes 47 specific requirements, divided into twelve sections:

- Risk Management
- Compliance Review and Training
- Carrier Selection
- Handling and Storage
- Job Procedures and Training
- Waste Management & Conservation
- Emergency Response/Public Preparedness
- Community Outreach
- Product Stewardship
- Internal RDP Audits
- RDP Corrective & Preventive Action
- RDP Document & Data Control

A key requirement of RDP and a condition of membership in NACD is verification of members' RDP policies and procedures by a third-party firm. Univar received the first Third-Party verification in 1995 and received a compliance certificate. We were re-certified in 2000 and again in 2004.

Univar maintains a leadership position in NACD, and remains firmly committed to the Responsible Distribution Process and its objective of promoting continual improvement in chemical handling and distribution.





**Univar USA Inc.
Safety Information**

I. INTRODUCTION

(A) Scope

Univar USA Inc. (UNIVAR) is committed to conducting its operations in a manner that minimizes the risk to the safety and health of our employees, customers, the public and the environment.

(B) Purpose

This Injury & Illness Prevention Program (IIPP) has been developed by UNIVAR for its employees who may be exposed to general and/or chemical hazards. This program meets the requirements of Senate Bill 198 enacted under California Labor Code Section 6401.7 and the General Industry Safety Orders Section 3203.

This IIPP represents only a portion of UNIVAR's Safety and Environmental Program. The program includes several written programs and manuals such as the Operating Standards Manual, Emergency Contingency Plan, Risk Management Program, Process Safety Management Program, Hazard Communication Program, Respiratory Protection Program, Confined Space Entry Program, Lock Out/Tag Out Program, Hot Work Program and Documentation Manual. The IIPP is not intended to be a standalone program but rather a supplement to all of the other current programs. The primary functions of this program are to inform employees of the regulation, highlight areas of occupational hazards, direct them to the proper means of minimizing the identified hazards and define the lines of communication between employees and management.

This IIPP is available for review by employees, government agencies, vendors, contractors or any other parties who have a need to examine the Program. The Program includes:



**Univar USA Inc.
Safety Information**

Employer Information:	Name, address, telephone number, type of business and main activity.
Administrator Information:	Person with the authority and responsibility to administer the program.
Safety & Health Hazard Evaluation:	A two step process which includes job classification and occupational hazard analysis.
Standard Operating Procedures/ Operating Standards:	Programs and procedures necessary to ensure employee safety and health in every aspect of their job.
Inspection Program:	Inspections are conducted: (1) when the IIPP is first established; (2) whenever new substances, processes, procedures, or equipment are introduced into the workplace; (3) whenever a new or previously unrecognized hazard is identified; (4) when occupational injuries or illnesses occur; and (5) whenever workplace conditions warrant an inspection. Scheduled daily, weekly and monthly inspections.
Training Program:	Employees receive initial, refresher and ongoing training as required.
Communication:	Provides a means to instruct employees on the hazards associated with each job classification; ensure employees' compliance with standard operating procedures and safe work practices; encourage employees to participate in the safety program and identify areas of concern and/or hazards.
Safety Award Program:	Company program that encourages and rewards employees for working safely.
Progressive Disciplinary Action Policy:	Company policy that disciplines employees that do not perform their job functions according to



**Univar USA Inc.
Safety Information**

established policies, procedures and guidelines. These policies, procedures and guidelines have been developed to establish a safe working environment for all of our employees and any deviation from them will not be tolerated.

Recordkeeping Requirements:

Includes this written program; hazard analysis; the OSHA 300 Log; Standard Operating Procedures; inspections; training; meeting records and disciplinary actions for a period of time prescribed

Program Reviews:

Review and assess this and other company programs as required to ensure their effectiveness and applicability.

Univar USA Inc.
17425 N.E. Union Hill Rd
Redmond, WA 98052
PO Box 34325
Seattle, WA
98124-1325 USA

T 425 889 3400
F 425 889 4100
www.univarusa.com



UNIVAR'S SECURITY PROGRAM

As a distributor of industrial chemicals and solvents, a responsible distribution member of the National Association of Chemical Distributors, and an active member of the communities we serve, Univar USA Inc. has long had policies and procedures in place to ensure the security of our products, facilities, employees and communities. On March 25th 2003, the Department of Transportation (DOT) enacted HM-232 to address concerns regarding the security of hazardous materials during transportation. The following summary outlines the major provisions of Univar's Security Program as it pertains to the safety and security of our products, facilities, employees and communities as well as DOT's security regulations.

SECURITY / VULNERABILITY ASSESSMENT

Due to the hazardous nature of the chemicals we manage and distribute, Univar constantly assesses its security and vulnerability concerning internal or external threats that could potentially disrupt operations or harm our employees, communities or the environment. Univar's security program addresses the following potential sources of loss or disruption:

- Theft, vandalism, and break-ins
- Theft of confidential business information
- Sabotage of equipment, utilities, and records
- Product contamination and tampering
- Bomb threats
- Civil unrest disrupting plant access and operations
- Workplace violence and assaults

Additionally, Univar has developed a risk-based matrix to identify areas of concern and has taken steps to address those areas of concern.

PERSONNEL SECURITY

Personnel security begins with hiring qualified employees. Univar has established policies and procedures to ensure we hire and maintain qualified employees. These policies and procedures include, but are not limited to:

- Pre-employment background checks
- Pre-employment and random drug tests for drivers and warehouse staff
- Policy on "Standards of Conduct" policy (included in the Employee Handbook)
- Policy on "Confidential Information" policy (included in the Employee Handbook)
- Checkout procedures for terminating employees
- Referral of illegal or criminal activities to law enforcement

UNAUTHORIZED ACCESS

Univar has established minimum facility security guidelines that each facility must implement and adhere to. Those minimum guidelines include but are not limited to:

- Perimeter and warehouse security
- Equipment security
- Access controls for production areas, warehouses, utility facilities, and offices
- Signs to direct visitors and vehicles to the appropriate entry points
- Visitor control

Univar employees have been trained to question unescorted person(s) within the operating areas, and to be watchful for unusual activity on company property or in the immediate surrounding areas.

FDA REGULATED PRODUCTS

The security of FDA regulated products falls within the overall facility security plan which complies with the various federal regulations governing chemical security, including the DOT and the Department of Homeland Security (DHS).

All FDA regulated products have tamper-evident seals or caps on the containers, including rail tank cars, tank trucks, intermediate bulk containers (IBCs), drums and pails. The use of tamper evident seals provides a mechanism for the warehousemen, driver and/or customer to identify potential tampering with the container.

In addition, all FDA regulated products are lot controlled. The lot number on the container is cross-referenced with the lot number on the bill of lading before delivery to the customer.

For FDA regulated products packaged/transferred at Univar USA facilities, all of the hoses and other devices used during the product transfer process are secured at the end of the packaging process by various means.

All inbound and outbound shipments of these products are inspected to assure they are properly packaged, labeled and have tamper evident seals in place.

SECURITY ASSESSMENT / EVALUATION

All facilities undergo periodic security review to evaluate the integrity and effectiveness of their security policies, procedures and systems.

RESPONSIBILITIES

Each Univar facility has designated an employee, and an alternate, as the site security coordinator. This person(s) will be responsible for performing the following security management functions:

- Prepare and implement a site security program consistent with the requirements herein
- Establish relationships with law enforcement and emergency response agencies
- Manage incident reporting procedures, conduct incident investigations, and if necessary, conduct investigations into breaches of company security policy
- Train employees about security awareness
- Address security issues in an emergency, crisis management planning and execution
- Periodically reassess the facility's site security program

TRAINING

Employees receive training regarding this security program and its implementation. Training will address the following items:

- Company security objectives
- Specific security procedures:
 - Product integrity
 - Personnel security
 - Facility security
 - En-route security
- Employee responsibilities

EN ROUTE SECURITY

Univar trucks are clearly marked with Univar's name and address on the cab doors. Products and routes will be evaluated to assess the security risks. Measures will be taken to secure hazardous cargo while in transit.

COMMON CARRIER EVALUATION

In addition to the above security measures, Univar has taken steps to verify our common carriers' compliance with DOT's HM-232 rules. Each common carrier has been asked to certify their security compliance with regards to HM-232.

Should you have any questions regarding any of the items noted in this security program summary, please feel free to contact your local Univar representative or myself at (425) 889-3776.

Respectfully,

A handwritten signature in black ink, appearing to read 'Ed Higbee', with a long horizontal flourish extending to the right.

Ed Higbee
Director – Regulatory, Health & Safety

I. Introduction

(A) Scope

Univar USA Inc. (UNIVAR) is committed to conducting its operations in a manner that minimizes the risk to the safety and health of our employees, customers, the public and the environment.

(B) Purpose

This Injury & Illness Prevention Program (IIPP) has been developed by UNIVAR for its employees who may be exposed to general and/or chemical hazards. This program meets the requirements of Senate Bill 198 enacted under California Labor Code Section 6401.7 and the General Industry Safety Orders Section 3203.

This IIPP represents only a portion of UNIVAR's Safety and Environmental Program and covers the California branch locations. The Program includes several written programs and manuals such as the Operating Standards Manual, Emergency Contingency Plan, Risk Management Program, Process Safety Management Program, Hazard Communication Program, Respiratory Protection Program, Confined Space Entry Program, Lock Out/Tag Out Program, Hot Work Program and Documentation Manual. The IIPP is not intended to be a stand-alone program but rather a supplement to all of the other current programs. The primary functions of this program are to inform employees of the regulation, highlight areas of occupational hazards, direct them to the proper means of minimizing the identified hazards and define the lines of communication between employees and management.

This IIPP is available for review by employees, government agencies, vendors, contractors or any other parties who have a need to examine the Program. The Program is managed by the Corporate Risk Management and EHS Departments. The Program includes:

Employer Information:	Univar USA Inc., 3075 Highland Parkway, Suite 200, Downers Grove, IL 60515-5560, Phil Hockaday-VP Global EHS (UK Based), Patrick Wallior-Director of H&S 425-889-3731, Kerri Howard-Director of Risk Management 331-777-6061.
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Administrator Information:	425-889-3791, chemical distribution (type of business and main activity).
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Person(s) with the authority and responsibility to administer this program. Phil Hockaday -VP Global EHS, Patrick Wallior- Director of H&S 425-889-3731, Kerri Howard- Director of Risk Management-331-777-6061.

Safety & Health Hazard Evaluation:	A two-step process which includes job classification and occupational hazard analysis.
Standard Operating Procedures/ Operating Standards:	Programs and procedures necessary to ensure employee safety and health in every aspect of their job.
Inspection Program:	Inspections are conducted: (1) when the IIPP is first established; (2) whenever new substances, processes, procedures, or equipment are introduced into the workplace; (3) whenever a new or previously unrecognized hazard is identified; (4) when occupational injuries or illnesses occur; and (5) whenever workplace conditions warrant an inspection. Scheduled daily, weekly and monthly inspections are also conducted. All inspection forms that implement the safety programs in OSM are located in VanNet under Operations.
Training Program:	Employees receive initial, refresher and also participate in the company's Serious about Safety program. Ongoing training is required and training is managed through the LMS.
Communication:	Provides a means to instruct employees on the hazards associated with each job classification; ensure employees' compliance with standard operating procedures and safe work practices; encourage employees to participate in the safety program and identify areas of concern and/or hazards.
Progressive Disciplinary Action Policy:	Company policy that disciplines employees that do not perform their job functions according to established policies, procedures and guidelines. These policies, procedures and guidelines have been developed to establish a safe working environment for all of our employees and any deviation from them will not be tolerated.

Recordkeeping Requirements:	Includes this written program; hazard analysis; the OSHA 300 Log; Standard Operating Procedures; inspections; training; meeting records and disciplinary actions for a period of time prescribed by laws, regulations or the UNIVAR's Record Retention Policy .
Program Reviews:	Review to ensure Cal-OSHA and other company programs are updated as required to ensure compliance and effectiveness.

II. Written Program**(A) Employer Information**

This IIPP is specifically designed for UNIVAR facility located at:

Address: 2600 S. Garfield Ave.

City: Commerce State: CA Zip Code: 90040

Telephone Number: (323) 727-7005

Type of Business: Distribution

Main Activity: Chemical Distribution

SIC Code: 5169

(B) Responsibility

The person with the authority and responsibility for implementing this IIPP:

Name: Chris Betancourt

Title: Branch Operations Manager

Alternate: Todd Walton

Title: District Operations Manager

(C) Safety & Health Hazard Evaluation

Careful review has been given to all positions and job functions within UNIVAR and the following job classifications have been determined to most accurately represent the workforce at our locations:

1) Administrative

This job classification includes positions in the office, accounting, sales, supervisory and management areas.

2) Material Handlers

This job classification includes positions in the warehouse, tank farm, laboratory and field technicians.

3) Maintenance

This job classification includes positions in vehicle and general facility maintenance.

4) Transportation

This job classification includes positions with full-time or part-time driving capacity.

A review of accidents, injuries, and illnesses, periodic and scheduled safety inspection records, information provided by employees, and each job classification identified above has been conducted to determine the occupational hazards associated with each job classification. These occupational hazards have been identified and are listed in Appendix A of this program. All Operations Managers and Supervisors have been trained by the Corporate EHS Department through Safety Compliance Leadership Training (SCLT) on hazard recognition and identifying controls to prevent injury. All employees are trained to report hazards and unsafe conditions at their work site without fear of reprisal. Employees also participate on the Safety Committees at the branch location. New committee members are assigned annually, rotation of employees ensure wider participation. Meeting minutes are documented (see Appendix A).

(D) Standard Operating Procedures/Operating Standards

UNIVAR has developed Standard Operating Procedures/Operating Standards to minimize exposure to the occupational hazards associated with each job classification. These Standard Operating Procedures/Operating Standards identify pertinent information such as safe working conditions, safe work practices, and personal protective equipment. UNIVAR's standard operating procedures are included in such documents as the Operating Standards Manual, Emergency/Contingency Plan, Risk Management Program, Process Safety Management Program, Hazard Communication Program, Respiratory Protection Program and the Confined Space Program.

(E) Inspection Program

(1) Summary

UNIVAR conducts inspections to identify and evaluate workplace hazards.

The inspections are performed when one of the following occurs:

1. The IIPP is first established.
2. New substances, processes, procedures or equipment which present potential new hazards are introduced into the workplace.
3. The employer becomes aware of new or previously unrecognized hazard.
4. An occupational injury or illness occurs.
5. Workplace conditions warrant an inspection.

Annual EHS audits that include the Program are performed by qualified internal auditors. Corrective actions to findings are tracked until closure. Hazard assessments and PPE certification are performed at least every 3 years or whenever modifications or new processes are introduced in operations, according to Operations Standards manual (OSM) Section 1.21. All audit reports include date of audit, name of auditors, completed audit checklists, and other supporting documentation. Records are maintained on file in the Document Manual File at the branch location.

UNIVAR also schedules periodic inspections of several work areas around the facility. These inspections are intended to address each aspect of our operations such as emergency response, personal protective equipment, loading and unloading areas (including railcars), hazardous waste and virgin material storage areas, repackaging and drumming areas, maintenance facilities and transportation vehicles. Each specific area has a designated inspection schedule. The schedules of inspection are based on the frequency of use and the hazards associated with each item.

The inspection schedule identifies the area, structure or equipment; the specific items to be inspected; the hazards or problems associated with each item and the frequency of inspections. The inspection schedule is identified in Appendix C of this program.

In addition to inspecting all aspects of the operations, periodic reviews are to be conducted to verify appropriate documentation of inspections, meetings, training, driver qualification files, etc. These reviews are conducted once or twice annually by area designated personnel as part of the environmental, safety and health audit. Where possible, audits/reviews are completed by personnel not affiliated with the facility to achieve maximum objectivity.

(2) Accident/Injury Investigation

UNIVAR is self-insured and has a vested interest in preventing occupational accidents, injuries or illnesses. Employees are required to report all incidents no matter how minor they might appear to be. Following a report of an incident, the supervisor/manager in charge is required to investigate each incident and document the findings in an *Incident Report* and enters the incident investigation into the Enablon incident management system. The report addresses:

- a) Type of Incident: Was it an employee injury, a near miss, etc.?
- b) Description: What happened? What are the facts of the incident?
- c) Root Cause: Why did the incident happen? Focuses on objective causes of the incident.

- d) Recommendations: – What corrective actions need to be taken to prevent reoccurrence.

This investigation process is designed to monitor and identify trends in employee behavior as well as the physical processes in the facility. The safety committee also reviews all *Incident Reports* for the previous month to determine/review the root cause of each incident and suggest corrective/disciplinary action if appropriate. A copy of the *Incident Report* form is included in Appendix E of this program.

(3) **Corrective Action**

An inspection program is only as effective as its corrective action plan. UNIVAR has two types of written corrective action plans. The remedial action section(s) of the Daily, Weekly and Monthly Inspection Forms addresses the deficiencies discovered during routinely scheduled inspections. The Safety Environmental Review Action Report addresses the deficiencies discovered during annual/biannual environmental, health and safety audits. UNIVAR's policy regarding corrective action related to cases of imminent danger is also discussed below.

The Inspection Forms list the items identified as deficient; the remedial action required correcting the deficiencies and the date that corrective action is to be completed. Items identified as deficient are ranked based on the severity of the potential hazard, i.e. items with high hazard potential are given priority over items with low hazard potential. Records of remedial action as part of the Inspection Forms will be maintained according to the facility's Record Retention Policy. Copies of the Inspection Forms are given in Appendix C of this program.

The Safety Environmental Review Action Report is designed to identify deficiencies during the environmental health and safety audits; establish corrective action; the identity of the person(s) responsible for the corrections and the date of completion for each item. The Safety Environmental Review Action Report is to be reviewed by and certified by the Area Operations Manager.

In cases where an imminent danger exists which can not be abated without endangering the health or safety employees, all personnel must be evacuated from the area except those necessary to correct the hazard. Employees selected to correct the hazard must be provided with all proper safeguards before taking corrective action.

(F) **Training**

Because of the physical nature of chemicals handled daily at Univar, USA training is a vital part of our operations. The primary purpose of a training program is to inform employees of the potential occupational hazards identified in the general work place and those specifically related to each job assignment. Further, the training program is designed to inform employees of the most effective means of minimizing the potential hazards associated with each job assignment. This includes safe working conditions, safe work practices and personal protective equipment.

Univar USA Training Program divided into three major components: initial, ongoing and refresher training. All training is entered and managed through the Learning Management System (LMS). Hardcopy training attendance sheets are also maintained as backup documentation at the branch location. Training requiring testing, results of the tests are also included in the documentation. Training records are retained based on the retention schedule defined by the Legal Department. All records are maintained at least the previous 5 years. Each component of the training program is identified below.

(1) **Initial Training**

- a) Administrative employees are trained on general office hazards and their limitations within operations areas. Additionally, administrative employees are trained on hazards associated with the classes of chemicals found on site, how to protect themselves in the event of an emergency and proper evacuation procedures. This is primarily accomplished through the Hazard Communication Program and the Contingency Plan.
- b) Operations personnel are trained based on the duties and functions to be performed in an emergency response organization. There are two categories:
 1. Operations personnel are required to complete a 24 hour training program consistent with OSHA's requirements set forth in 29 CFR Section 1910.120(q)(6) for *Hazardous Materials Technicians*. The 24 hour OSHA training program consists of all of requirements set forth above for the *First Responder Operations level* as well as:
 - Emergency response plan implementation.
 - Classification, identification and verification of known and unknown materials by the use of field survey instruments and equipment.
 - Chemical and toxicological terminology and behavior.
 - Being able to function in an assigned role in the Incident Command System.
 2. Operations managers and supervisors are required to complete a 24 hour training program consistent with OSHA's requirements set forth in 29 CFR Section 1910.120 (e)(3). The 24 hour OSHA training program consists of:
 - Emergency response plan development and implementation.
 - Hazard and risk assessment techniques.

- Selection and use of personal protective equipment.
- Safe use of engineering controls and equipment on the site.
- Medical surveillance (symptoms and signs which might indicate overexposure to hazards).
- Decontamination procedures.
- Confined space awareness.
- Spill containment program development and implementation.

Also, consistent with OSHA's training requirement set forth in 29 CFR Section 1910.120(e)(4), operations supervisors and managers are required to receive an additional 8 hour training program on:

- The company's safety & health program(s).
- The company's employee training program(s).
- The company's personal protective equipment program(s).
- The company's spill containment program(s).
- The company's health hazard monitoring procedures and techniques.

Employees who can demonstrate by means of documentation, through either previous work experience or equivalent training competency in the above mentioned areas will be exempted from the initial training.

(2) **Ongoing Training**

The second component of Univar USA training program is ongoing training. Ongoing training is designed to instruct employees on new policies and procedures, changes in facility equipment, processes, or materials handled and address issues of concern and/or trends. It is also designed to reinforce previous training if management deems it necessary.

Ongoing training is facilitated through monthly safety meetings. Safety meetings are scheduled in advance and attendance is mandatory. Safety meetings are designed to provide an opportunity for employees to express their concerns about any particular aspect of our operations or make suggestions on enhancing operations or minimizing the potential hazards associated with a specific job function.

(3) **Refresher Training**

The third component of Univar USA' training program is refresher training. Refresher training is required for specific training topics. It is intended to maintain a high level of proficiency throughout employment and ensure constant updates of training information. A list of required refresher training is included in Appendix F of this program.

(G) **Communication**

UNIVAR requires its employees to participate in the safety program. The opportunity to participate in the safety program is facilitated through safety meetings; safety committee meetings and Management's Open Door Policy. Management monitors employee behavior and addresses these behaviors through the company's safety award program and progressive disciplinary action policy.

(1) **Safety Meetings**

The first and most often utilized avenue of communication is the monthly safety meetings. Because management participates in all safety meetings, it is the most convenient means of establishing a two-way dialogue between employees and management. Safety meetings are divided into two parts. The first part is the training session, which provides information on new policies, procedures, equipment, or process changes.

The second part of the safety meeting is to allow employees and management to discuss any concerns.

(2) **Safety Committee Meetings**

UNIVAR also holds monthly safety committee meetings for a duration of 30-60 minutes, depending on meeting content. The safety committee is comprised of at least one Branch Operations Supervisor/Manager and representatives from each operating area of the facility. The responsibilities of the safety committee include:

- To serve in planning the facility's safety program; to take a leading role in making the program operate successfully and to influence others to work safely.
- To plan and organize employee safety meetings, including training aids, outside speakers, etc.
- To establish procedures for handling suggestions and recommendations and prepare minutes of its meetings and employee safety meetings.

- To study and recommend adoption of changes to procedures pertaining to the use of personal protective equipment or devices for the elimination or control of hazards based on suggestions of operation personnel.
- To establish a system of follow-ups and deadlines on all recommendations to the committee to see that compliance is achieved.
- To review Incident Notifications for completeness and to make recommendations to management in regards to corrective actions, disciplinary actions, etc.
- To ensure an accident-free operation through constant monitoring of conditions, preventative maintenance and the establishment of safe operating procedures with the help and recommendations of operations personnel.
- To ensure that the safety and health policy of the company is communicated to every employee and that such policy is effectively implemented.
- To communicate new safety ideas to area management so that all facilities may benefit.
- To document committee attendees, discussion topics, action items and a corrective action schedule to meet recordkeeping and follow-up requirements.
- To ensure compliance with federal, state and local safety regulations.

(3) Management's Open Door Policy

UNIVAR recognizes that some employees will be less comfortable discussing health and safety issues in open forum situations such as the monthly safety and safety committee meetings. For this reason, UNIVAR has chosen to adopt an Open Door Policy. This policy encourages employees to discuss any health and safety concerns with management by allowing them to present the issue to a supervisor either directly or on an anonymous basis at any time without fear of reprimand or reprisal. The supervisor must investigate the issue and report the findings to the employee that originally presented the issue. The supervisor must take corrective action, where applicable, within a reasonable amount of time.

(H) US Recognition Program Overview**(1) ABCD Recognition (Above and Beyond the Call of Duty)**

Employees may be nominated for going above and beyond the call of duty in any aspect of their job related to health and safety, regulatory compliance or operational excellence. Nominations are forwarded to the ROM who meets monthly with a committee of regional and national EHS and operations personnel to award ABCD letters of recognition. The letters are a token of appreciation for taking the time and initiative to go above and beyond the call of duty. Any IC employee can be nominated for ABCD recognition.

(2) Group Annual Recognition

In Jan. 2013, branches will receive a perpetual plaque for ‘years without an OSHA recordable injury’. An annual tag will be presented to each branch after every year in which all employees at the branch have had no recordable injuries. The annual tag will be hung from a plaque that hangs in the branch reception area to show suppliers, customers, inspectors, and members of our communities that we are “Serious About Safety.”

(I) Progressive Disciplinary Action Policy

UNIVAR is committed to protecting the health and safety of its employees and will take all actions necessary to ensure that employees comply with safe work practices and the use of personal protective equipment. Employees who consistently violate company policies and procedures with respect to health and safety will be subject to disciplinary action up to and including termination.

(J) Recordkeeping

This IIPP and its components including hazard identification, Standard Operating Procedures, inspections, training program, communication, and all other forms of documentation associated with this program will be maintained for three (3) years unless otherwise specified by other statute or the company's *Record Retention Policy*. This Program and any records associated with it will be available for inspection or review by employees, government agencies, vendors, contractors or other selected parties.

(K) Program Reviews

As part of UNIVAR's commitment to the health and safety of its employees, this and all other programs associated with these issues will be reviewed to ensure their effectiveness and applicability. Applicable CalOSHA standards are reviewed to ensure compliance at the branch location. CalOSHA standards are incorporated into the branch standard operating procedures where applicable. Any policies or sections found to be inadequate will be revised, updated and implemented into the respective program. Employee training will be conducted for any changes made to this or related programs.



CERTIFICATE OF LIABILITY INSURANCE

 DATE(MM/DD/YYYY)
05/31/2017

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Aon Risk Services Central, Inc. Philadelphia PA Office One Liberty Place 1650 Market Street Suite 1000 Philadelphia PA 19103 USA		CONTACT NAME: PHONE (A/C. No. Ext): (866) 283-7122 FAX (A/C. No.): 800-363-0105 E-MAIL ADDRESS:	
INSURED Univar Inc. 3075 Highland Parkway Suite 200 Downers Grove IL 60515 USA		INSURER(S) AFFORDING COVERAGE	
		INSURER A: Illinois Union Insurance Company	NAIC # 27960
		INSURER B: ACE American Insurance Company	22667
		INSURER C: Indemnity Insurance Co of North America	43575
		INSURER D: Agri General Insurance Company	42757
		INSURER E: ACE Fire Underwriters Insurance Co.	20702
		INSURER F:	

COVERAGES

CERTIFICATE NUMBER: 570066616531

REVISION NUMBER:

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

Limits shown are as requested

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
B	☒ COMMERCIAL GENERAL LIABILITY ☐ CLAIMS-MADE ☒ OCCUR GEN'L AGGREGATE LIMIT APPLIES PER ☒ POLICY ☐ PRO-JECT ☐ LOC ☐ OTHER			XSLG27866190 SIR applies per policy terms & conditions	06/01/2017	06/01/2018	EACH OCCURRENCE DAMAGE TO RENTED PREMISES (Ea occurrence) MED EXP (Any one person) PERSONAL & ADV INJURY GENERAL AGGREGATE PRODUCTS - COMP/OP AGG	\$3,000,000 \$1,000,000 Excluded \$3,000,000 \$3,000,000 \$3,000,000
B	AUTOMOBILE LIABILITY ☒ ANY AUTO ☐ OWNED AUTOS ONLY ☐ SCHEDULED AUTOS ☐ HIRED AUTOS ONLY ☐ NON-OWNED AUTOS ONLY			ISA H09059532 Commercial Auto	06/01/2017	06/01/2018	COMBINED SINGLE LIMIT (Ea accident) BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident)	\$5,000,000
A	☒ UMBRELLA LIAB ☒ OCCUR ☐ EXCESS LIAB ☐ CLAIMS-MADE ☐ DED ☒ RETENTION			XCEG27380566004 SIR applies per policy terms & conditions	06/01/2017	06/01/2018	EACH OCCURRENCE AGGREGATE	\$4,000,000 \$4,000,000
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR / PARTNER / EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	Y/N	N/A	WLRG64409906 (AOS) WLRG64409918 (AZ, MA)	06/01/2017	06/01/2018	☒ PER STATUTE ☐ OTH-ER E.L. EACH ACCIDENT E.L. DISEASE-EA EMPLOYEE E.L. DISEASE-POLICY LIMIT	 \$1,000,000 \$1,000,000 \$1,000,000
A	Env Site Liab			PPLG27846762001 Claims-Made SIR applies per policy terms & conditions	06/01/2016	06/01/2018	Aggregate SIR Occurrence	\$10,000,000 \$500,000 \$10,000,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
 Evidence of Insurance.

CERTIFICATE HOLDER

CANCELLATION

Univar Inc. 3075 Highland Parkway, Suite 200 Downers Grove IL 60515 USA	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.
	AUTHORIZED REPRESENTATIVE <i>Aon Risk Services Central, Inc.</i>

Holder Identifier :

Certificate No : 570066616531

AGENCY CUSTOMER ID: 570000014538

LOC #:



ADDITIONAL REMARKS SCHEDULE

Page _ of _

AGENCY Aon Risk Services Central, Inc.		NAMED INSURED Univar Inc.	
POLICY NUMBER See Certificate Number: 570066616531			
CARRIER See Certificate Number: 570066616531	NAIC CODE	EFFECTIVE DATE:	

ADDITIONAL REMARKS

THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD FORM,
FORM NUMBER: ACORD 25 FORM TITLE: Certificate of Liability Insurance

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER	
INSURER	
INSURER	
INSURER	

ADDITIONAL POLICIES If a policy below does not include limit information, refer to the corresponding policy on the ACORD certificate form for policy limits.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YYYY)	POLICY EXPIRATION DATE (MM/DD/YYYY)	LIMITS	
	AUTOMOBILE LIABILITY							
B				ISA H09059520 Truckers Liability	06/01/2017	06/01/2018	Combined Single Limi	\$5,000,000
	WORKERS COMPENSATION							
B		N/A		WCUC64409943 (CA, OH, OR, WA) SIR applies per policy terms & conditions	06/01/2017	06/01/2018		
E		N/A		SCFC64409931 (WI)	06/01/2017	06/01/2018		
D		N/A		WLRC6440992A (TN)	06/01/2017	06/01/2018		
	OTHER							
	☒ Claims made							

EXHIBIT B:
Insurance Requirements
(Chemical Vendor - Sodium Hydroxide)

Contractor shall procure and maintain for the duration of the contract insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder and the results of that work by the Contractor, their agents, representatives, employees or subcontractors.

MINIMUM SCOPE AND LIMIT OF INSURANCE

Coverage shall be at least as broad as:

1. **Commercial General Liability (CGL):** Insurance Services Office Form CG 00 01 covering CGL on an "occurrence" basis, including products and completed operations, property damage, bodily injury and personal & advertising injury with limits no less than **\$3,000,000** per occurrence. If a general aggregate limit applies, either the general aggregate limit shall apply separately to this project/location or the general aggregate limit shall be twice the required occurrence limit.
2. **Automobile Liability (AL):** ISO Form Number CA 00 01 covering any auto (Code 1) with combined single limits of liability of no less than **\$1,000,000** per accident for bodily injury and property damage, including **MCS90** endorsement form.
3. **Workers' Compensation:** as required by the State of California, with Statutory Limits, and Employer's Liability Insurance with limit of no less than **\$1,000,000** per accident for bodily injury or disease.
4. **Environmental Impairment/Contractors' Pollution Legal Liability** with limits no less than **\$1,000,000** per occurrence or claim, to include liability for Groundwater contamination, Explosion, Sudden and Accidental and Environmental cleanup, etc.

If the contractor maintains higher limits than the minimums shown above, the City of Stockton requires and shall be entitled to coverage for the higher limits maintained by the contractor. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to the City of Stockton.

Other Insurance Provisions

The insurance policies are to contain, or be endorsed to contain, the following provisions:

- ***Additional Insured Status***
 The *City of Stockton, its Mayor, Council, officers, representatives, agents, employees and volunteers* are to be covered as additional insureds on the CGL and AL policy with respect to liability arising out of work or operations performed by or on behalf of the Contractor including materials, parts, or equipment furnished in connection with such work or operations. General liability coverage can be provided in the form of an endorsement to the Contractor's insurance (**at least as broad as** ISO Form CG 20 10 11 85 or if not available, through the addition of both

CG 20 10 and CG 20 37 if a later edition is used). Policy shall cover City of Stockton, its Mayor, Council, officers, representatives, agents, employees and volunteers for all locations work is done under this contract.

- **Primary Coverage**

For any claims related to this contract, the Contractor's insurance coverage shall be endorsed as primary insurance as respects the *City of Stockton, its Mayor, Council, officers, representatives, agents, employees and volunteers*. Any insurance or self-insurance maintained by the *City of Stockton, its Mayor, Council, officers, representatives, agents, employees and volunteers* shall be excess of the Contractor's insurance and shall not contribute with it. The City of Stockton does not accept endorsements limiting the Contractor's insurance coverage to sole negligence of the Named Insured.

- **Notice of Cancellation**

Each insurance policy required above shall provide that coverage shall not be canceled, except with notice to the City of Stockton.

- **Waiver of Subrogation**

Contractor hereby grants to the City of Stockton a waiver of any right to subrogation which any insurer of said Contractor may acquire against the City of Stockton by virtue of the payment of any loss under such insurance. Contractor agrees to obtain any endorsement that may be necessary to affect this waiver of subrogation, but this provision applies regardless of whether or not the City of Stockton has received a waiver of subrogation endorsement from the insurer.

- **Deductibles and Self-Insured Retentions**

Any deductibles or self-insured retentions must be declared to and approved by the City of Stockton Risk Services. The City of Stockton may require the Contractor to purchase coverage with a lower deductible or retention or provide proof of ability to pay losses and related investigations, claim administration, and defense expenses within the retention.

- **Acceptability of Insurers**

Insurance is to be placed with insurers with a current A.M. Best's rating of no less than A:VII if admitted to do business in the State of California; If not admitted to do business in the State of California, insurance is to be placed with insurers with a current A.M. Best's rating of no less than A+:X.

- **Claims Made Policies**

If any of the required policies provide claims-made coverage:

- o The Retroactive Date must be shown, and must be before the date of the contract or the beginning of contract work.

- o If Claims Made policy form is used, a three (3) year discovery and reporting tail period of coverage is required after completion of work.

- ***Verification of Coverage***

Contractor shall furnish the City of Stockton with original certificates and amendatory endorsements required by this clause. All certificates and endorsements are to be received and approved by the City of Stockton Risk Services before work commences. Failure to obtain the required documents prior to the work beginning shall not waive the Contractor's obligation to provide them. The City of Stockton reserves the right to require complete, certified copies of all required insurance policies, including endorsements required by these specifications, at any time, for any reason or no reason.

- ***Special Risks or Circumstances***

The City of Stockton reserves the right to modify these requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other circumstances.

- ***Certificate holder address***

Proper address for mailing certificates, endorsements and notices shall be:

- o City of Stockton
- o Attention: Risk Services
- o 425 N. El Dorado Street
- o Stockton, CA 95202

City of Stockton Risk Services Phone: 209-937-5037

City of Stockton Risk Services Fax: 209-937-8558

- ***Maintenance of Insurance***

If at any time during the life of the Contract or any extension, the Contractor fails to maintain the required insurance in full force and effect, all work under the Contract shall be discontinued immediately. Any failure to maintain the required insurance shall be sufficient cause for the CITY to terminate this Contract.

- ***Subcontractors***

If the Contractor should subcontract all or any portion of the work to be performed in this contract, the Contractor shall cover the sub-contractor, and/or require each sub-contractor to adhere to all subparagraphs of these Insurance Requirements section. Similarly, any cancellation, lapse, reduction or change of sub-contractor's insurance shall have the same impact as described above.