



Univar USA Inc Material Safety Data Sheet

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MSDS No:

Version No:

Order No:

Univar USA Inc., 17425 NE Union Hill Rd., Redmond WA 98052  
(425) 889 3400

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Emergency Assistance

For emergency assistance involving chemicals call  
Chemtrec - (800) 424-9300

COMPANY IDENTITY: Univar  
PRODUCT IDENTITY: BLEND CHELATED CAUSTIC 30%

DATE: 07/13/11  
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### SAFETY DATA SHEET

This Safety Data Sheet conforms to ANSI Z400.5, and to the format requirements and the International Chemical Safety Cards of the Global Harmonizing System. THIS SDS COMPLIES WITH 29 CFR 1910.1200 (HAZARD COMMUNICATION STANDARD)  
IMPORTANT: Read this SDS before handling & disposing of this product. Pass this information on to employees, customers, & users of this product.

#### SECTION 1. IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER

PRODUCT IDENTITY: BLEND CHELATED CAUSTIC 30%  
SDS NUMBER: BCS80922  
NEW MSDS DATE: 07/13/2011  
COMPANY IDENTITY: Univar  
COMPANY ADDRESS: 17425 NE Union Hill Road  
COMPANY CITY: Redmond, WA 98052  
COMPANY PHONE: 1-425-889-3400  
EMERGENCY PHONES: CHEMTREC: 1-800-424-9300 (USA)  
CANUTEC: 1-613-996-6666 (CANADA)

#### SECTION 2. HAZARDS IDENTIFICATION

**DANGER!!**

EXPOSURE PREVENTION: AVOID ALL CONTACT!

RISK STATEMENTS:

R35 Causes severe burns.

SAFETY STATEMENTS:

S1/2 Keep locked up and out of the reach of children.  
S24/25 Avoid contact with skin and eyes.  
S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.  
S26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
S45 In case of accident, or if you feel unwell, seek medical advice immediately. (Show the label where possible).



#### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

MATERIAL	CAS#	EINECS#	WT %
Water	7732-18-5	231-791-2	65-80
Sodium Hydroxide*	1310-73-2	215-185-5	20-30
Chelate Blend	Proprietary	-	0- 5

Other components: Each of the other components are present in < 1% concentration, 0.1% for potential carcinogens, reproductive toxins, respiratory tract sensitizers, and mutagens.

None of the other components contribute significant additional hazards at the concentrations present in this product. All pertinent hazard information has been provided in this document, per the requirements of the Federal Occupational Safety and Health Administration Standard (29 CFR 1910.1200), U.S. State equivalent Standards, and Canadian Hazardous Materials Identification system Standards (CPR 4).

SEE SECTIONS 8, 11 & 12 FOR TOXICOLOGICAL INFORMATION.

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#### SECTION 4. FIRST AID MEASURES

##### EYE CONTACT:

If this product enters the eyes, open victim's eyes while under gently running water. Use sufficient force to open eyelides. Have victim "roll" eyes. Minimum flushing is for 15 minutes. Victim must seek immediate medical attention.

##### SKIN CONTACT:

If the product contaminates the skin, immediately begin decontamination with running water. Minimum flushing is for 15 minutes. Remove contaminated clothing, taking care not to contaminate eyes. If skin becomes irritated and irritation persists, medical attention may be necessary. Wash contaminated clothing before reuse, discard contaminated shoes.

##### INHALATION:

After high vapor exposure, remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, trained personnel should immediately begin artificial respiration. If the heart has stopped, trained personnel should immediately begin cardiopulmonary resuscitation (CPR).

##### SWALLOWING:

Rinse mouth. Give plenty of water to drink. Do NOT induce vomiting. GET MEDICAL ATTENTION IMMEDIATELY. Do NOT give liquids to an unconscious or convulsing person.

#### SECTION 5. FIRE FIGHTING MEASURES

##### FIRE & EXPLOSION PREVENTIVE MEASURES

Isolate from acids, extreme heat and open flame.

##### EXTINGUISHING MEDIA

In case of fire in surroundings, water spray, carbon dioxide, foam, dry chemical, Halon, or any "ABC" Class extinguisher.

##### SPECIAL FIRE FIGHTING PROCEDURES

Water spray may be ineffective on fire but can protect fire-fighters & cool closed containers. Use fog nozzles if water is used. Do not enter confined fire-space without full bunker gear. (Helmet with face shield, bunker coats, gloves & rubber boots). Use NIOSH approved positive-pressure self-contained breathing apparatus.

##### UNUSUAL EXPLOSION AND FIRE PROCEDURES

Noncombustible.

Isolate from acids. Closed containers may burst if exposed to extreme heat. Applying to hot surfaces requires special precautions. Run-off from fire control can cause pollution.

#### SECTION 6. ACCIDENTAL RELEASE MEASURES

##### PERSONAL PROTECTIVE MEASURES:

Keep unprotected personnel away.  
Use complete chemical protective suit with self-contained breathing apparatus.

##### ENVIRONMENTAL PRECAUTIONS:

Keep from entering storm sewers and ditches which lead to waterways.

##### CONTAINMENT AND CLEAN-UP MEASURES:

Stop spill at source. Dike and contain.  
Sweep spilled material into dry, sealable containers.  
Wash away remainder with plenty of water.

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## SECTION 7. HANDLING AND STORAGE

### HANDLING

Use only with adequate ventilation. Do not get in eyes, on skin or clothing. Wear OSHA Standard full face shield. Consult Safety Equipment Supplier. Wear goggles, face shield, gloves, apron & footwear impervious to material. Wash clothing before reuse. NEVER pour water into this substance. When dissolving or diluting, always add it slowly to the water. To minimize static discharge when transferring, ensure electrical continuity by bonding and grounding all equipment. Use an inlet line diameter of at least 3.5 inches (8.9 centimeters) with a maximum flow rate of 1 meter/second.

### STORAGE

Keep separated from strong oxidants, strong acids, metals, food & feedstuffs. Keep dry. Do not store above 49 C/120 F. Keep container tightly closed & upright when not in use to prevent leakage. Wear full face shield, gloves & full protective clothing when opening or handling. When empty, drain completely, replace bungs securely.

### NONBULK: CONTAINERS:

If this product is transferred into another container, only use portable containers and dispensing equipment (faucet, pump, drip can) approved for corrosive, acidic liquids. Store containers in a cool, dry location, away from direct sunlight, sources of intense heat, or where freezing is possible. Material should be stored in secondary containers or in a diked area, as appropriate. Store containers away from incompatible chemicals (see Section 10, Stability and Reactivity). Storage areas should be made of corrosion resistant materials. Post warning and "NO SMOKING" signs in storage and use areas, as appropriate. Empty containers may contain residual liquid or vapors which are corrosive; therefore, empty containers should be handled with care. Never store food, feed, or drinking water in containers which held this product.

### BULK CONTAINERS:

All tanks and pipelines which contain this material must be labeled. Perform routine maintenance on tanks or pipelines which contain this product. Report all leaks immediately to the proper personnel.

### TANK CAR SHIPMENTS:

Tank cars carrying this product should be loaded and unloaded in strict accordance with tank-car manufacturer's recommendation and all established on-site safety procedures. Appropriate personal protective equipment must be used (see Section 8, Engineering Controls and Personal Protective Equipment.). All loading and unloading equipment must be inspected, prior to each use. Loading and unloading operations must be attended, at all times. Tank cars must be level, brakes must be set or wheels must be locked or blocked prior to loading or unloading. Tank car (for loading) or storage tanks (for unloading) must be verified to be correct for receiving this product and be properly prepared, prior to starting the transfer operations. Hoses must be verified to be in the correct positions, before starting transfer operations. A sample (if required) must be taken and verified (if required) prior to starting transfer operations. All lines must be blown-down and purged before disconnecting them from the tank car or vessel.

### PROTECTIVE PRACTICES DURING MAINTENANCE OF CONTAMINATED EQUIPMENT:

Follow practices indicated in Section 6 (Accidental Release Measures). Make certain application equipment is locked and tagged-out safely. Always use this product in areas where adequate ventilation is provided. Decontaminate equipment before maintenance begins by a triple-rinse with water followed, if necessary, by using sodium bicarbonate and an additional rinse. Collect all rinsates and dispose of according to applicable Federal, State, or local procedures.

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#### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

MATERIAL	CAS#	EINECS#	TWA (OSHA)	TLV (ACGIH)
Sodium Hydroxide*	1310-73-2	215-185-5	None Known	None Known
Water	7732-18-5	231-791-2	None Known	None Known
Chelate Blend	Proprietary	-	None Known	None Known

MATERIAL	CAS#	EINECS#	CEILING	IDHL	HAP
Sodium Hydroxide*	1310-73-2	215-185-5	2 mg/m3	10 mg/m3	No

This product contains no EPA Hazardous Air Pollutants (HAP) in amounts > 0.1%.

#### RESPIRATORY EXPOSURE CONTROLS

Maintain airborne contaminant concentrations below exposure limits given above. If respiratory protection is needed, use only protection authorized in 29 CFR 1910.134, European Standard EN 149, or applicable State regulations. If adequate ventilation is not available or there is potential for airborne exposure above the exposure limits, a respirator may be worn up to the respirator exposure limitations, check with respirator equipment manufacturer's recommendations/limitations. For a higher level of protection, use positive pressure supplied air respiration protection or Self Contained Breathing Apparatus or if oxygen levels are below 19.5% or are unknown.

#### EMERGENCY OR PLANNED ENTRY INTO UNKNOWN CONCENTRATIONS OR IDLH CONDITIONS

Positive pressure, full-face piece Self Contained Breathing Apparatus; or positive pressure, full-face piece Self Contained Breathing Apparatus with an auxilliary positive pressure Self Contained Breathing Apparatus.

#### VENTILATION

LOCAL EXHAUST: Necessary                      MECHANICAL (GENERAL): Necessary  
SPECIAL: None                                      OTHER: None  
Please refer to ACGIH document, "Industrial Ventilation, A Manual of Recommended Practices", most recent edition, for details.

#### EYE PROTECTION:

Splash goggles or safety glasses. Face-shields are recommended when the operation can generate splashes, sprays or mists.

#### HAND PROTECTION:

Wear appropriate impervious gloves for routine industrial use. Use impervious gloves for spill response, as stated in Section 6 of this SDS (Accidental Release Measures).

NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.

#### BODY PROTECTION:

Use body protection appropriate for task. Cover-all, rubber aprons, or chemical protective clothing made from impervious materials are generally acceptable, depending on the task.

#### WORK & HYGIENIC PRACTICES:

Provide readily accessible eye wash stations & safety showers.  
Wash at end of each workshift & before eating, smoking or using the toilet.  
Promptly remove clothing that becomes contaminated. Destroy contaminated leather articles. Launder or discard contaminated clothing.

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#### SECTION 9. PHYSICAL & CHEMICAL PROPERTIES

APPEARANCE:	Liquid, Clear Light Straw to Turbid
ODOR:	None
ODOR THRESHOLD:	Not Available
pH (Neutrality):	12 - 14
MELTING POINT/FREEZING POINT:	12 C / 54 F
BOILING POINT:	144 C / 291 F
FLASH POINT (TEST METHOD):	Not Applicable
EVAPORATION RATE (n-BUTYL ACETATE=1):	Not Applicable
FLAMMABILITY CLASSIFICATION:	Non-Combustible
LOWER FLAMMABLE LIMIT IN AIR (% by vol):	Not Applicable
UPPER FLAMMABLE LIMIT IN AIR (% by vol):	Not Available
VAPOR PRESSURE (mm of Hg)@20 C	Not Available
VAPOR DENSITY (air=1):	Not Available
GRAVITY @ 68/68F / 20/20C:	
SPECIFIC GRAVITY (Water=1):	1.333
POUNDS/GALLON:	11.10
WATER SOLUBILITY:	Complete
PARTITION COEFFICIENT (n-Octane/Water):	Not Available
AUTO IGNITION TEMPERATURE:	Not Applicable
DECOMPOSITION TEMPERATURE:	Not Available
VOC'S (>0.44 Lbs/Sq In) :	0.0 Vol% /0.0 g/L / 0.000 Lbs/Gal
TOTAL VOC'S (TVOC)*:	0.0 Vol% /0.0 g/L / 0.000 Lbs/Gal
NONEXEMPT VOC'S (CVOC)*:	0.0 Vol% /0.0 g/L / 0.000 Lbs/Gal
HAZARDOUS AIR POLLUTANTS (HAPS):	0.0 Wt% /0.0 g/L / 0.000 Lbs/Gal
NONEXEMPT VOC PARTIAL PRESSURE (mm of Hg @ 20 C)	0.0

\* Using California South Coast Air Quality Management District (SCAQMD) Rule 443.1.

#### SECTION 10. STABILITY & REACTIVITY

##### STABILITY

Stable under normal conditions.

##### CONDITIONS TO AVOID

Isolate from extreme heat and open flame.

##### MATERIALS TO AVOID

Reacts violently with fire extinguishers containing water.  
The substance is a strong base, reacts violently with acids and is corrosive.  
Reacts with water generating sufficient heat to ignite combustible materials.  
Reacts violently with strong acids, causing fire & explosion hazard. Attacks many plastics, rubber, coatings, many metals, such as aluminum, zinc, tin, & lead. forming flammable/explosive gas (hydrogen).  
Reacts with ammonium salts to produce ammonia & causing fire hazard.  
Rapidly absorbs carbon dioxide & water from the air.  
Contact with moisture will generate heat.  
Avoid contact with leather or wool. Reactions with food sugars may form carbon monoxide.

##### HAZARDOUS DECOMPOSITION PRODUCTS

Sodium Oxide & Hydroxide from heating.

##### HAZARDOUS POLYMERIZATION

Will not occur.

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## SECTION 11. TOXICOLOGICAL INFORMATION

### ACUTE HAZARDS

#### EYE & SKIN CONTACT:

Severe burns to skin, defatting, dermatitis.  
Severe burns to eyes, redness, tearing, blurred vision.  
Liquid can cause severe skin & eye burns. Wash thoroughly after handling.

#### INHALATION:

Severe respiratory tract irritation may occur. Vapor harmful.  
The applicable occupational exposure limit value should not be exceeded during any part of the working exposure.

#### SWALLOWING:

Harmful or fatal if swallowed.

### SUBCHRONIC HAZARDS/CONDITIONS AGGRAVATED

#### CONDITIONS AGGRAVATED:

None Known.

### CHRONIC HAZARDS

#### CANCER, REPRODUCTIVE & OTHER CHRONIC HAZARDS:

This product has no carcinogens listed by IARC, NTP, NIOSH, OSHA or ACGIH, as of this date, greater or equal to 0.1%.

#### MUTAGENICITY: This product is not reported to produce mutagenic effects in humans.

Mutation data is available for Sodium Hydroxide (a component of this product), obtained during clinical studies on animal tissues exposed to high doses.

#### EMBRYOTOXICITY: This product is not reported to produce embryotoxic effects in humans.

#### TERATOGENICITY: This product is not reported to produce teratogenic effects in humans.

#### REPRODUCTIVE TOXICITY: This product is not reported to cause reproductive effects in humans.

A mutagen is a chemical which causes permanent changes to genetic material (DNA) such that the changes will propagate through generational lines. An embryotoxin is a chemical which causes damage to a developing embryo (such as: within the eight weeks of pregnancy in humans), but the damage does not propagate across generational lines. A teratogen is a chemical which causes damage to a developing fetus, but the damage does not propagate across generational lines. A reproductive toxin is any substance which interferes in any way with the reproductive process.

### MAMMALIAN TOXICITY INFORMATION

#### TOXICITY DATA: Toxicology information for components > 1% concentration is given below:

##### SODIUM HYDROXIDE:

Eye irritancy (monkey): 1%, 24 hours (severe)  
Eye irritancy (rabbit): 500 ml, 24 hours (severe)  
Eye irritancy (rabbit): 1% solution (severe)  
Eye irritancy (rabbit): 1 mg, 24 hours (severe)  
Cytogenic analysis system (grasshopper parenteral): 20 mg  
LD50 (interperoneal, mouse): 40 mg/kg  
LDLo (oral, rabbit): 500 mg/kg

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#### SECTION 12. ECOLOGICAL INFORMATION

##### AQUATIC ANIMAL INFORMATION:

SODIUM HYDROXIDE:  
LC100 (Cyprinus carpio): 180 ppm/24 hours/25 C  
TLm (mosquito fish): 125 ppm/96 hour (fresh water)  
TLm (bluegill): 99 mg/L/48 hour (tap water)

##### MOBILITY IN SOIL

Mobility of this material has not been determined.

##### DEGRADABILITY

This product is completely biodegradable.

##### ACCUMULATION

Bioaccumulation of this product has not been determined.

#### SECTION 13. DISPOSAL CONSIDERATIONS

Processing, use or contamination may change the waste management options.  
Recycle / dispose of observing national, regional, state, provincial and local  
health, safety & pollution laws. If in doubt, contact appropriate agencies.

#### SECTION 14. TRANSPORT INFORMATION

IF > 2083 LB / 947 KG OF THIS PRODUCT IN 1 CONTAINER,  
IT EXCEEDS THE "RQ" OF SODIUM HYDROXIDE.

DOT SHIPPING NAME: UN1824, RQ, Sodium Hydroxide solution, 8, PG-II  
DRUM LABEL: (CORROSIVE)  
IATA / ICAO: UN1824, Sodium Hydroxide solution, 8, PG-II  
IMO / IMDG: UN1824, Sodium Hydroxide solution, 8, PG-II  
EMERGENCY RESPONSE GUIDEBOOK NUMBER: 154

#### SECTION 15. REGULATORY INFORMATION



##### EPA REGULATION:

SARA SECTION 311/312 HAZARDS: Acute Health

All components of this product are on the TSCA list.

SARA Title III Section 313 Supplier Notification

This product contains the indicated <\*> toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning & Community Right-To-Know Act of 1986 & of 40 CFR 372. This information must be included in all MSDSs that are copied and distributed for this material.

SARA TITLE III INGREDIENTS	CAS#	EINECS#	WT%	(REG.SECTION)	RQ(LBS)
Sodium Hydroxide*	1310-73-2	215-185-5	20-30	(311,312)	1000



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**SECTION 15. REGULATORY INFORMATION (CONTINUED)**

> 2083 LB / 947 KG OF THIS PRODUCT IN 1 CONTAINER EXCEEDS THE "RQ" OF SODIUM HYDROXIDE .  
Any release equal to or exceeding the RQ must be reported to the National Response Center (800-424-8802) and appropriate state and local regulatory agencies as described in 40 CFR 302.6 and 40 CFR 355.40 respectively.  
Failure to report may result in substantial civil and criminal penalties.  
State & local regulations may be more restrictive than federal regulations.

**STATE REGULATIONS:**

CALIFORNIA PROPOSITION 65: This product contains no chemicals known to the State of California to cause cancer & reproductive toxicity.

**U.S. STATE REGULATED COMPONENTS: (HAZARDOUS SUBSTANCE LISTS):**

COMPONENT	AK	CA	FL	IL	KS	MA	MI	MN	MO	NJ	ND
Sodium Hydroxide	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

COMPONENT	PA	RI	TX	WV	WI
Sodium Hydroxide	Yes	Yes	Yes	Yes	Yes

**INTERNATIONAL REGULATIONS**

The components of this product are listed on the chemical inventories of the following countries:

Australia (AICS), Canada (DSL, NDSL), China (IECSC), Europe (EINECS, ELINCS), Japan (METI/CSCL, MHLW/ISHL), South Korea (KECI), New Zealand (NZIoC), Philippines (PICCS), Switzerland (SWISS), Taiwan (NECSI), USA (TSCA).

**CANADA: WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM (WHMIS)**

D2B: Irritating to skin / eyes.  
E: Corrosive Material.

**SECTION 16. OTHER INFORMATION**

**HAZARD RATINGS:**

HEALTH (NFPA): 3, HEALTH (HMIS): 3, FLAMMABILITY: 0, REACTIVITY: 1  
(Personal Protection Rating to be supplied by user based on use conditions.)  
This information is intended solely for the use of individuals trained in the NFPA & HMIS hazard rating systems.

**EMPLOYEE TRAINING**

See Section 2 for Risk & Safety Statements. Employees should be made aware of all hazards of this material (as stated in this SDS) before handling it.

## Univar USA Inc Material Safety Data Sheet

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For Additional Information contact MSDS Coordinator during business hours, Pacific time: (425) 889-3400

### **Notice**

Univar USA Inc. ("Univar") expressly disclaims all express or implied warranties of merchantability and fitness for a particular purpose, with respect to the product or information provided herein, and shall under no circumstances be liable for incidental or consequential damages.

Do not use ingredient information and/or ingredient percentages in this MSDS as a product specification. For product specification information refer to a product specification sheet and/or a certificate of analysis. These can be obtained from your local Univar sales office.

All information appearing herein is based upon data obtained from the manufacturer and/or recognized technical sources. While the information is believed to be accurate, Univar makes no representations as to its accuracy or sufficiency. Conditions of use are beyond Univar's control and therefore users are responsible to verify this data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their use, handling, and disposal of the product, or from the publication or use of, or reliance upon, information contained herein.

This information relates only to the product designated herein, and does not relate to its use in combination with any other material or in any other process