



Univar USA Inc Material Safety Data Sheet

MSDS No:

Version No:

Order No:

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

Emergency Assistance

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

aCOMPANY IDENTITY: Univar USA Inc.
PRODUCT IDENTITY: CAUSTIC POTASH 45% - UNIVAR DIST

DATE: 03/05/11
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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: CAUSTIC POTASH 45% - UNIVAR DIST
SDS NUMBER: CDS1780
NEW MSDS DATE: 03/05/2011
COMPANY IDENTITY: Univar USA Inc.
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).

SEE SECTIONS 8, 11 & 12 FOR TOXICOLOGICAL INFORMATION.



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SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

MATERIAL	CAS#	EINECS#	WT %
Water	7732-18-5	231-791-2	55%
Potassium Hydroxide*	1310-58-3	215-181-3	45%

SECTION 4. FIRST AID MEASURES

EYE CONTACT:

For eyes, flush with plenty of water for 15 minutes & get medical attention.

SKIN CONTACT:

In case of contact with skin immediately remove contaminated clothing.
Wash thoroughly with soap & water. Wash contaminated clothing before reuse.

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

Reacts with some metals, such as aluminum, zinc, tin, & lead.
forming flammable/explosive gas (hydrogen).

EXTINGUISHING MEDIA

Use dry powder, In case of fire in surroundings,
all extinguishing agents allowed.

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.

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SECTION 5. FIRE FIGHTING MEASURES (CONTINUED)

UNUSUAL EXPLOSION AND FIRE PROCEDURES

Noncombustible.

Isolate from acids.

Closed containers may explode if exposed to extreme heat.

Applying to hot surfaces requires special precautions.

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.

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 gloves, apron & footwear impervious to this 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.

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SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

MATERIAL	CAS#	EINECS#	TWA (OSHA)	TLV (ACGIH)
Potassium Hydroxide*	1310-58-3	215-181-3	None Known	None Known
Water	7732-18-5	231-791-2	None Known	None Known

MATERIAL	CAS#	EINECS#	CEILING	STEL(OSHA/ACGIH)	HAP
Potassium Hydroxide*	1310-58-3	215-181-3	2 ppm	None Known	No

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

RESPIRATORY EXPOSURE CONTROLS

A respiratory protection program that meets OSHA 29 CFR 1910.134 and ANSI Z86.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

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.

PERSONAL PROTECTIONS:

Wear OSHA Standard full face shield. Consult Safety Equipment Supplier. Wear gloves, apron & footwear impervious to this material. Wash clothing before reuse.

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, Water-White
ODOR:	None
ODOR THRESHOLD:	Not Available
pH (Neutrality):	14.0
MELTING POINT/FREEZING POINT:	-20 F
BOILING RANGE (IBP,50%,Dry Point):	Not Applicable
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	17.5
VAPOR DENSITY (air=1):	0.670
GRAVITY @ 68/68F / 20/20C:	
SPECIFIC GRAVITY (Water=1):	1.450
POUNDS/GALLON:	12.079
WATER SOLUBILITY:	Complete
PARTITION COEFFICIENT (n-Octane/Water):	Not Available
AUTO IGNITION TEMPERATURE:	Not Applicable
DECOMPOSITION TEMPERATURE:	Not Available
REFRACTIVE INDEX:	1.333
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 acids.

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.

HAZARDOUS DECOMPOSITION PRODUCTS

Potassium 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%.

MAMMALIAN TOXICITY INFORMATION

No mammalian information is available on this product.

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SECTION 12. ECOLOGICAL INFORMATION

AQUATIC ANIMAL INFORMATION:

No aquatic environmental information is available on this product.
The substance may be hazardous in the environment.
Special attention should be given to water organisms.

MOBILITY IN SOIL

Mobility of this material has not been determined.

DEGRADABILITY

This product is completely biodegradable.

ACCUMULATION

This product does not bioaccumulate.

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

DOT SHIPPING NAME: UN1814, Potassium Hydroxide solution, 8, PG-II
DRUM LABEL: (CORROSIVE)
IATA / ICAO: UN1814, Potassium Hydroxide solution, 8, PG-II
IMO / IMDG: UN1814, Potassium Hydroxide solution, 8, PG-II
EMERGENCY RESPONSE GUIDEBOOK NUMBER: 154



> 1770 LB / 804 KG OF THIS PRODUCT IN 1 CONTAINER EXCEEDS THE "RQ" OF POTASSIUM HYDROXIDE.

SECTION 15. REGULATORY INFORMATION

EPA REGULATION:

SARA SECTION 311/312 HAZARDS: Acute Health

All components of this product are on the TSCA list.
This material contains no known products restricted under SARA Title III,
Section 313 in amounts greater or equal to 1%.

SARA TITLE III INGREDIENTS	CAS#	EINECS#	WT%	(REG.SECTION)	RQ(LBS)
Potassium Hydroxide*	1310-58-3	215-181-3	50-60	(311,312)	1000

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SECTION 15. REGULATORY INFORMATION (CONTINUED)

> 1770 LB / 804 KG OF THIS PRODUCT IN 1 CONTAINER EXCEEDS THE "RQ" OF POTASSIUM 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.

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: 2
(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.

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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.

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