



Suite 450
One North Shore Center
12 Federal Street
Pittsburgh, PA 15212

Safety Data Sheet

KR-CLDP46

1. IDENTIFICATION

Product name KR-CLDP46
Description Water treatment
Product class Water treatment
Supplier address Suite 450
One North Shore Center
12 Federal Street
Pittsburgh, PA 16212
Telephone numbers
Company Phone Number (412) 321-9800
Emergency Telephone CHEMTREC 1-800-424-9300

2. HAZARDS IDENTIFICATION

Hazard classification Acute toxicity, oral Category 3
Skin corrosion/irritation Category 2
Serious eye damage/eye irritation Category 2A
Signal word Danger
Hazard statements Toxic if swallowed. Causes skin irritation. Causes serious eye irritation.
Pictograms of related hazards



Precautionary statements

Prevention

Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Wear eye protection/face protection. Wear protective gloves.

Response

Specific measures:

IF ON SKIN: Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

IF SWALLOWED: Immediately call a poison center/doctor. Rinse mouth. Do NOT induce vomiting.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Storage

Store locked up.

Disposal

Dispose of contents/container in accordance with local/regional/national/international regulations.

3. COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENT(S)	CAS Number	Weight %
Urea hydrochloride	506-89-8	80 - 100

4. FIRST-AID MEASURES

Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
Skin contact	Remove contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
Ingestion	Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting without advice from poison control center. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs. Do not use mouth-to-mouth method if victim ingested the substance. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.
Inhalation	If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms develop or persist.
Most important symptoms/effects, acute and delayed	Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

General information Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

Protective equipment and precautions for firefighters Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Firefighting equipment/instructions In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk. Use standard firefighting procedures and consider the hazards of other involved materials.

Specific hazards Use standard firefighting procedures and consider the hazards of other involved materials.

Hazardous combustion products During fire, gases hazardous to health may be formed

General information No unusual fire or explosion hazards noted.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up: This product is miscible in water.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Prevent product from entering drains. Following product recovery, flush area with water.

Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination

Environmental precautions Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground. Inform appropriate managerial or supervisory personnel of all environmental releases.

7. HANDLING AND STORAGE

Advice on safe handling Provide adequate ventilation. Avoid contact with eyes, skin, and clothing. Do not taste or swallow. When using, do not eat, drink or smoke. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices. Use care in handling/storage.

Storage conditions Store locked up. Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: 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. Eye wash facilities and emergency shower must be available when handling this product.

Eye/face protection Wear safety glasses with side shields (or goggles) and a face shield.

Skin protection Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier. Wear appropriate chemical resistant clothing.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

General hygiene considerations Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

Chemical Name	OSHA PEL	ACGIH TLV
Ethylene glycol monobutyl ether (CAS 111-76-2)	240 mg/m ³	20 mg/m ³ , TWA

Biological limit values**ACGIH Biological Exposure Indices**

Impurities	Value	Determinant	Specimen	Sampling Time
Ethylene glycol monobutyl ether (CAS 111-76-2)	200 mg/g	Butoxyacetic acid (BAA), with hydrolysis	Creatinine in urine	*

* - For sampling details, please see the source document.

9. PHYSICAL AND CHEMICAL PROPERTIES
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pH	<1.0
Appearance	Clear colorless to pale yellow liquid
Odor	Characteristic
Odor Threshold	No information available
Melting/freezing point	< 40 °F (< 4.4 °C) estimated
Initial boiling point/boiling range	> 212 °F (> 100 °C) estimated
Flash point	> 200 °F (> 93.3 °C)
Evaporation rate	No information available
Flammability (solid, gas)	Combustible II estimated
Upper/lower flammability or explosive limits	No information available
Vapor pressure	< 1.0 mm Hg estimated
Vapor density	No information available
VOC content	0.5 %
Specific gravity	1.20
Solubility	Complete
Partition coefficient n-octanol/water	No information available
Auto-ignition temperature	No information available
Decomposition temperature	No information available
Viscosity	No information available

10. STABILITY AND REACTIVITY

Reactivity	Reacts violently with strong alkaline substances. This product may react with reducing agents.
Chemical stability	Stable under normal conditions of storage and handling.
Hazardous polymerization	Polymerization will not occur.
Conditions to avoid	Do not mix with other chemicals. Contact with incompatible materials.
Incompatibilities	Strong oxidizing agents.

Hazardous decomposition products None known

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation	No adverse effects due to inhalation are expected.
Skin contact	Causes skin irritation.
Eye contact	Causes serious eye irritation
Ingestion	Toxic if swallowed.

Symptoms related to the physical, chemical and toxicological characteristics

Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.

Information on toxicological effects

Acute toxicity	Toxic if swallowed.
Skin corrosion/irritation	Causes skin irritation.
Serious eye damage/eye irritation	Causes serious eye irritation.

Respiratory or skin sensitization

Respiratory sensitization	Not a respiratory sensitizer.
Skin sensitization	This product is not expected to cause skin sensitization.
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity

This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity

Ethylene glycol monobutyl ether (CAS 111-76-2 3)
Not classifiable as to carcinogenicity to humans.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Reproductive toxicity

This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure

May cause respiratory irritation.

Specific target organ toxicity - repeated exposure

Not classified.

Aspiration hazard

Not an aspiration hazard

12. ECOLOGICAL INFORMATION

Test Material	Parameter	Result
Product	48 hr LC ₅₀ , Daphnia Magna	202.21 mg/L
	96 hr LC ₅₀ , Fathead minnow	202.48 mg/L

Ecotoxicity	Because of the low pH of this product, it would be expected to produce significant ecotoxicity upon exposure to aquatic organisms and aquatic systems.
Persistence and degradability	No data is available on the degradability of this product
Bioaccumulative potential	No data available
Mobility in soil	No data available
Other adverse effects	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. DISPOSAL CONSIDERATIONS

Disposal	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.
Local disposal regulations	Dispose in accordance with all applicable regulations
Hazardous waste code	The waste code should be assigned in discussion between the user, the producer and the waste disposal company
Waste from residues / unused products	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. TRANSPORT INFORMATION

US Department of Transportation (DOT) – Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not established.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not regulated as dangerous goods

15. REGULATORY INFORMATION

U.S. REGULATIONS This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

CERCLA Hazardous Substance List (40 CFR 302.4)
Ethylene glycol monobutyl ether (CAS 111-76-2) Listed

SARA 304 Emergency release notification Not regulated

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050) Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Immediate Hazard - Yes
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance Not listed

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting) Not regulated

Chemical name	CAS number	% by wt.
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Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated

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

Not regulated

Safe Drinking Water Act (SDWA) Not regulated.

US state regulations

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed

US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

Ethylene glycol monobutyl ether (CAS 111-76-2)

US. Massachusetts RTK - Substance List

Ethylene glycol monobutyl ether (CAS 111-76-2)

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

Ethylene glycol monobutyl ether (CAS 111-76-2)

US. Pennsylvania Worker and Community Right-to-Know Law

Ethylene glycol monobutyl ether (CAS 111-76-2)

US. Rhode Island RTK

Ethylene glycol monobutyl ether (CAS 111-76-2)

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s). A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. OTHER INFORMATION

HMIS Ratings	Health—2; Flammability—0; Reactivity—0
NFPA Codes	Health—2; Flammability—0; Reactivity—0; Special Hazard—None
Hazard Rating Scale	Minimal—0; Slight—1; Moderate—2; Serious—3; Severe—4
SDS Issue Date	January 22, 2016
Revision Date	January 19, 2016, Section 12

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information, and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal, and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.