

Precautionary Statements - Prevention

Do not breathe dust/fume/gas/mist/vapors/spray
 Wash face, hands and any exposed skin thoroughly after handling
 Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
 Immediately call a poison center or doctor/physician
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
 Wash contaminated clothing before reuse
 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing
 Immediately call a poison center or doctor/physician
 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other hazards

Harmful to aquatic life with long lasting effects

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical name	CAS No	Weight-%
Monoethanolamine	141-43-5	10-15
Benzyl alcohol	100-51-6	5-10
Ethylene glycol monophenyl ether	122-99-6	5-10
Sodium dodecyl benzene sulphonate	25155-30-0	1-5
Sodium metasilicate	6834-92-0	1-5
Sodium hydroxide	1310-73-2	1-5

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

Description of first aid measures

Eye Contact	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor/physician.
Skin Contact	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. Get medical attention if irritation develops or persists.
Inhalation	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a poison center or doctor/physician.
Ingestion	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Drink 2-3 large glasses of water. Immediately call a poison center or doctor/physician. Never give anything by mouth to an unconscious person.

Most important symptoms and effects, both acute and delayed

Symptoms Causes severe skin burns and eye damage. May be irritating to the mouth, throat, esophagus and gastrointestinal system.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically. Dermatitis or other pre-existing skin conditions may be aggravated by overexposure to this product.

5. FIRE-FIGHTING MEASURES**Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical

Combustion products may be toxic.

Hazardous combustion products Carbon oxides. Nitrogen oxides (NO_x).

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Wear alkali resistant clothing.

6. ACCIDENTAL RELEASE MEASURES**Personal precautions, protective equipment and emergency procedures**

Personal Precautions Use personal protection recommended in Section 8.

Environmental precautions

Environmental precautions Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. See Section 12, Ecological Information. See Section 13: DISPOSAL CONSIDERATIONS. See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for Containment Prevent further leakage or spillage if safe to do so.

Methods for Clean-Up Pick up with mop, wet/dry vac, or absorbent material. Rinse area with clear water and allow floor to dry before allowing traffic.

7. HANDLING AND STORAGE**Precautions for safe handling**

Advice on Safe Handling Handle in accordance with good industrial hygiene and safety practice. Use personal protection recommended in Section 8. Avoid contact with skin, eyes or clothing. Wash face, hands and any exposed skin thoroughly after handling. Do not breathe dust/fume/gas/mist/vapors/spray. Keep containers closed when not in use.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Store locked up. Do not store near acids. Store on low shelves. Store at room temperature.

Packaging Materials Rinse container before discarding.

Incompatible Materials Chlorine bleach. Acids.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Monoethanolamine 141-43-5	STEL: 6 ppm TWA: 3 ppm	TWA: 3 ppm TWA: 6 mg/m ³ (vacated) TWA: 3 ppm (vacated) TWA: 8 mg/m ³ (vacated) STEL: 6 ppm (vacated) STEL: 15 mg/m ³	IDLH: 30 ppm TWA: 3 ppm TWA: 8 mg/m ³ STEL: 6 ppm STEL: 15 mg/m ³
Sodium metasilicate 6834-92-0	2 mg/m ³	2 mg/m ³	-
Sodium hydroxide 1310-73-2	Ceiling: 2 mg/m ³	TWA: 2 mg/m ³ (vacated) Ceiling: 2 mg/m ³	IDLH: 10 mg/m ³ Ceiling: 2 mg/m ³

Appropriate engineering controls

Engineering Controls Ensure adequate ventilation, especially in confined areas. Eyewash stations. Showers.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Splash goggles or safety glasses.

Skin and Body Protection Rubber gloves. Normal work clothing (long sleeved shirts and long pants) is recommended. Wear water or chemical resistant footwear when scrubbing floors.

Respiratory Protection No protection is ordinarily required under normal conditions of use and with adequate ventilation.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Liquid	Odor	Rose floral fragrance
Appearance	Clear red solution	Odor Threshold	Not determined
Color	Clear red		

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	11.8 - 12.2 (conc.) 10.9 - 11.3 (1:10 dilution)	
Melting point / freezing point	Not determined	
Boiling point / boiling range	100 °C / 212 °F	
Flash point	None	Tag Closed Cup
Evaporation Rate	1.0	(n-BuAc =1)
Flammability (Solid, Gas)	Liquid-Not applicable	
Flammability Limit in Air		
Upper flammability or explosive limits	Not applicable	
Lower flammability or explosive limits	Not applicable	
Vapor Pressure	Not determined	
Vapor Density	Not determined	
Relative Density	1.03	
Water Solubility	Mostly Soluble	

Solubility in other solvents	Not determined
Partition Coefficient	Not determined
Autoignition temperature	Not determined
Decomposition temperature	Not determined
Kinematic viscosity	Not determined
Dynamic Viscosity	Not determined
Explosive Properties	Not determined
Oxidizing Properties	Not determined

10. STABILITY AND REACTIVITY

Reactivity

Not reactive under normal conditions.

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

None under normal processing.

Hazardous Polymerization Hazardous polymerization does not occur.

Conditions to Avoid

Keep separated from incompatible substances. Keep out of reach of children.

Incompatible materials

Chlorine bleach. Acids.

Hazardous decomposition products

Carbon oxides. Nitrogen oxides (NOx). Sulfur oxides.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact Causes severe eye damage.

Skin Contact Causes severe skin burns.

Inhalation Avoid breathing vapors or mists.

Ingestion May be harmful if swallowed.

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Monoethanolamine 141-43-5	= 1720 mg/kg (Rat)	= 1 mL/kg (Rabbit) = 1000 mg/kg (Rabbit)	-
Benzyl alcohol 100-51-6	= 1230 mg/kg (Rat)	= 2 g/kg (Rabbit)	= 8.8 mg/L (Rat) 4 h
Sodium xylenesulfonate 1300-72-7	= 1000 mg/kg (Rat)	-	-
Ethylene glycol monophenyl ether 122-99-6	= 1850 mg/kg (Rat)	= 5 mL/kg (Rabbit)	> 0.057 mg/L (Rat) 8 h
Sodium dodecyl benzene sulphonate 25155-30-0	= 438 mg/kg (Rat)	-	-
Sodium metasilicate 6834-92-0	= 1153 mg/kg (Rat)	-	-

Sodium hydroxide 1310-73-2	= 325 mg/kg (Rat)	= 1350 mg/kg (Rabbit)	-
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Symptoms related to the physical, chemical and toxicological characteristics

Symptoms Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity Based on the information provided, this product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document .

Oral LD50 2,698.80 mg/kg
Dermal LD50 5,013.80 mg/kg
ATEmix (inhalation-dust/mist) 5.66 mg/L

12. ECOLOGICAL INFORMATION

Ecotoxicity

Harmful to aquatic life with long lasting effects.

Component Information

Chemical name	Algae/aquatic plants	Fish	Crustacea
Monoethanolamine 141-43-5	15: 72 h <i>Desmodesmus subspicatus</i> mg/L EC50	300 - 1000: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static 227: 96 h <i>Pimephales promelas</i> mg/L LC50 flow-through 200: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 flow-through 3684: 96 h <i>Brachydanio rerio</i> mg/L LC50 static 114 - 196: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 static	65: 48 h <i>Daphnia magna</i> mg/L EC50
Benzyl alcohol 100-51-6	35: 3 h <i>Anabaena variabilis</i> mg/L EC50	460: 96 h <i>Pimephales promelas</i> mg/L LC50 static 10: 96 h <i>Lepomis macrochirus</i> mg/L LC50 static	23: 48 h water flea mg/L EC50
Ethylene glycol monophenyl ether 122-99-6	500: 72 h <i>Desmodesmus subspicatus</i> mg/L EC50	220 - 460: 96 h <i>Leuciscus idus</i> mg/L LC50 static 366: 96 h <i>Pimephales promelas</i> mg/L LC50 static 337 - 352: 96 h <i>Pimephales promelas</i> mg/L LC50 flow-through	500: 48 h <i>Daphnia magna</i> mg/L EC50
Sodium dodecyl benzene sulphonate 25155-30-0		10.8: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 static	
Sodium metasilicate 6834-92-0		210: 96 h <i>Brachydanio rerio</i> mg/L LC50 semi-static 210: 96 h <i>Brachydanio rerio</i> mg/L LC50	216: 96 h <i>Daphnia magna</i> mg/L EC50
Sodium hydroxide 1310-73-2		45.4: 96 h <i>Oncorhynchus mykiss</i> mg/L LC50 static	

Persistence/Degradability

Not determined.

Bioaccumulation

There is no data for this product.

Mobility

Chemical name	Partition coefficient
Monoethanolamine 141-43-5	-1.91
Benzyl alcohol 100-51-6	1.1
Ethylene glycol monophenyl ether 122-99-6	1.13

Other Adverse Effects

Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated Packaging Disposal should be in accordance with applicable regional, national and local laws and regulations.

California Hazardous Waste Status

Chemical name	California Hazardous Waste Status
Sodium hydroxide 1310-73-2	Toxic Corrosive

14. TRANSPORT INFORMATION

Note Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT

UN/ID No UN1760
Proper Shipping Name Corrosive Liquid, n.o.s. (Monoethanolamine)
Hazard class 8
Packing Group II

IATA

UN number UN1760
Proper Shipping Name Corrosive Liquid, n.o.s. (Monoethanolamine)
Transport hazard class(es) 8
Packing Group II

IMDG

UN number UN1760
Proper Shipping Name Corrosive Liquid, n.o.s. (Monoethanolamine)
Transport hazard class(es) 8
Packing Group II

15. REGULATORY INFORMATION

International Inventories

Chemical name	TSCA	TSCA Inventory Status	DSL/NDSL	EINECS/ELI NCS	ENCS	IECSC	KECL	PICCS	AICS
Monoethanolamine	X	ACTIVE	X	X	X	X	X	X	X
Benzyl alcohol	X	ACTIVE	X	X	X	X	X	X	X
Sodium xylenesulfonate	X	ACTIVE	X	X	X	X	X	X	X
Ethylene glycol monophenyl ether	X	ACTIVE	X	X	X	X	X	X	X
Sodium dodecyl benzene sulphonate	X	ACTIVE	X	X	X	X	X	X	X
Sodium metasilicate	X	ACTIVE	X	X	X	X	X	X	X
Sodium hydroxide	X	ACTIVE	X	X	X	X	X	X	X

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Sodium dodecyl benzene sulphonate 25155-30-0	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ
Sodium hydroxide 1310-73-2	1000 lb		RQ 1000 lb final RQ RQ 454 kg final RQ

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical name	CAS No	Weight-%	SARA 313 - Threshold Values %
Ethylene glycol monophenyl ether - 122-99-6	122-99-6	5-10	1.0

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Sodium dodecyl benzene sulphonate	1000 lb			X
Sodium hydroxide	1000 lb			X

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical name	New Jersey	Massachusetts	Pennsylvania
Monoethanolamine 141-43-5	X	X	X
Ethylene glycol monophenyl ether 122-99-6	X		X
Sodium dodecyl benzene sulphonate 25155-30-0	X	X	X
Sodium hydroxide 1310-73-2	X	X	X

16. OTHER INFORMATION**NFPA****Health Hazards**

3

Flammability

0

Instability

0

Special Hazards

Not determined

HMIS**Health Hazards**

Not determined

Flammability

Not determined

Physical hazards

Not determined

Personal Protection

Not determined

Issue Date:

27-Dec-2011

Revision Date:

17-Feb-2020

Revision Note:

Reformulation

Disclaimer

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 a 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.

End of Safety Data Sheet