

Safety Data Sheet
acc. to OSHA HCS

Printing date 10/31/2019

Version 1

Reviewed on 10/31/2019

1 Identification

- **Trade name:** VAL-U-CLEAN MMC-3
- **Application of the substance / the mixture** *Industrial cleaner*
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
ValCOOL, LLC
5230 Brittmoore Road
Houston, TX 77041 USA
+1 (800) 244 9004
support@valcool.com
- **Information department:** *Product safety department*
- **Emergency telephone number:** CHEMTREC: 1-800-424-9300

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS05 Corrosion

Skin Corr. 1B H314 Causes severe skin burns and eye damage.
Eye Dam. 1 H318 Causes serious eye damage.

- **Label elements**

- **GHS label elements** *The product is classified and labeled according to the Globally Harmonized System (GHS).*
- **Hazard pictograms**



GHS05

- **Signal word** *Danger*

- **Hazard-determining components of labeling:**

2-(2-aminoethoxy)ethanol

- **Hazard statements**

Causes severe skin burns and eye damage.

- **Precautionary statements**

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

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/doctor.

Specific treatment (see on this label).

Store locked up.

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

- **Classification system:**

- **NFPA ratings (scale 0 - 4)**



Health = 3

Fire = 0

Reactivity = 0

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- HMIS-ratings (scale 0 - 4)

HEALTH		Health = *3
FIRE		Fire = 0
REACTIVITY		Reactivity = 0

- Other hazards

- Results of PBT and vPvB assessment

- PBT: Not applicable.

- vPvB: Not applicable.

3 Composition/information on ingredients

- Chemical characterization: Mixtures

- Description: Mixture of the substances listed below with nonhazardous additions.

- Dangerous components:

929-06-6 2-(2-aminoethoxy)ethanol	≥10-≤25%
94441-92-6 beta-Alanine, N-(2-carboxyethyl)-N-(2-ethylhexyl)-, sodium salt (1:1)	≥0-≤2.5%
2235-43-0 pentasodium hydrogen C,C',C"-nitrilotris(methylphosphonate)	≥0-≤2.5%

4 First-aid measures

- Description of first aid measures

- General information: Immediately remove any clothing soiled by the product.

- After inhalation: In case of unconsciousness place patient stably in side position for transportation.

- After skin contact: Immediately wash with water and soap and rinse thoroughly.

- After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.

- After swallowing: Drink copious amounts of water and provide fresh air. Immediately call a doctor.

- Information for doctor:

- Most important symptoms and effects, both acute and delayed No further relevant information available.

- Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

- Extinguishing media

- Suitable extinguishing agents: Carbon Dioxide, Dry Chemical, Alcohol Foam or a light water spray.

- Special hazards arising from the substance or mixture No further relevant information available.

- Advice for firefighters

- Full protective clothing and approved self-contained breathing apparatus if necessary for fire fighting personnel.

- Protective equipment: No special measures required.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures

- Wear protective equipment. Keep unprotected persons away.

- Environmental precautions: Do not allow to enter sewers/ surface or ground water.

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· Methods and material for containment and cleaning up:

Stop leak if you can do so without risk. Prevent entry into waterways, sewers, basements or confined areas.

Use neutralizing agent.

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

· Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

· Protective Action Criteria for Chemicals**· PAC-1:**

929-06-6 2-(2-aminoethoxy)ethanol: 9 mg/m³

· PAC-2:

929-06-6 2-(2-aminoethoxy)ethanol: 99 mg/m³

· PAC-3:

929-06-6 2-(2-aminoethoxy)ethanol: 590 mg/m³

7 Handling and storage

· Handling:**· Precautions for safe handling**

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of aerosols.

· Information about protection against explosions and fires:

Keep container closed when not in use. Store in a cool, dry, well ventilated place away from incompatible materials.

· Conditions for safe storage, including any incompatibilities**· Storage:****· Requirements to be met by storerooms and receptacles:**

Keep container closed when not in use. Store in a cool, dry, well ventilated place away from incompatible materials.

· Information about storage in one common storage facility:

Keep container tightly closed in a cool, well-ventilated place. Keep away from source of ignition.

· Further information about storage conditions: *Keep receptacle tightly sealed.***· Specific end use(s)** *No further relevant information available.*

8 Exposure controls/personal protection

· Additional information about design of technical systems: *No further data; see item 7.***· Control parameters****· Components with limit values that require monitoring at the workplace:**

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

· Additional information: *The lists that were valid during the creation were used as basis.***· Exposure controls****· Personal protective equipment:****· General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

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· Breathing equipment:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· Protection of hands:

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

When contact is likely wear chemical resistant gloves and boots.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:

Tightly sealed goggles

9 Physical and chemical properties**· Information on basic physical and chemical properties****· General Information****· Appearance:****Form:** Liquid**Color:** Yellow**Odor:** Amine-like**pH- Value:**

Not applicable.

Flash point:

Does not ignite.

Self-igniting:

No Danger

Danger of explosion:

1.05 g/cm³ (8.76225 lbs/gal)

Specific Gravity at 20 °C (68 °F):

N.D.

Density:

Not determined.

Evaporation rate:

Water: limited by viscosity

Solubility in / Miscibility with**Water:**

Kinematic: Not determined.

Viscosity:**Kinematic:****Solvent content:****Water:**

70.0 %

VOC content:

0.00 %

0.0 g/l / 0.00 lb/gal

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· Other information*No further relevant information available.***10 Stability and reactivity**

- Reactivity** *No further relevant information available.*
- Chemical stability**
- Thermal decomposition / conditions to be avoided:** *Stable under normal conditions.*
- Possibility of hazardous reactions** *No dangerous reactions known.*
- Conditions to avoid** *No further relevant information available.*
- Incompatible materials:** *Do not mix with oxidizers.*
- Hazardous decomposition products:** *Carbon Dioxide and Carbon Monoxide and various unidentified organic hydrocarbons.*

11 Toxicological information**· Information on toxicological effects****· Acute toxicity:****· LD/LC50 values that are relevant for classification:****929-06-6 2-(2-aminoethoxy)ethanol**

Oral LD50 5,660 mg/kg (rat)

Dermal LD50 1,190 mg/kg (rabbit)

· Primary irritant effect:**· on the skin:** *Caustic effect on skin and mucous membranes.***· on the eye:** *Strong caustic effect.***· Sensitization:** *Product is classified as moderately irritating to the skin.***· Additional toxicological information:***The product shows the following dangers according to internally approved calculation methods for preparations:**Corrosive**Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.***· Carcinogenic categories****· IARC (International Agency for Research on Cancer)***None of the ingredients is listed.***· NTP (National Toxicology Program)***None of the ingredients is listed.***· OSHA-Ca (Occupational Safety & Health Administration)***None of the ingredients is listed.***12 Ecological information****· Toxicity****· Aquatic toxicity:** *No further relevant information available.***· Persistence and degradability** *No further relevant information available.***· Behavior in environmental systems:****· Bioaccumulative potential** *No further relevant information available.***· Mobility in soil** *No further relevant information available.***· Additional ecological information:****· General notes:***Must not reach bodies of water or drainage ditch undiluted or unneutralized.*

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- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:** Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

· UN-Number	
· DOT	UN3055
· UN proper shipping name	
· DOT	2-(2-Aminoethoxy) ethanol mixture
· Transport hazard class(es)	
· DOT	
	
· Class	8 Corrosive substances
· Label	8
· Label	8
· Packing group	
· DOT	III
· Environmental hazards:	Not applicable.
· Special precautions for user	Warning: Corrosive substances
· Danger code (Kemler):	80
· EMS Number:	F-A,S-B
· Stowage Category	A
· Segregation Code	SG35 Stow "separated from" SGG1-acids
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
· DOT	
· Quantity limitations	On passenger aircraft/rail: 5 L On cargo aircraft only: 60 L
· ADR	
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml

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- **IMDG**
- **Limited quantities (LQ)**
- **Excepted quantities (EQ)**
- **UN "Model Regulation":**

5L
Code: E1
Maximum net quantity per inner packaging: 30 ml
Maximum net quantity per outer packaging: 1000 ml
UN 3055 2-(2-AMINOETHOXY)ETHANOL MIXTURE, 8, III

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**

- **Sara**

- **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

- **Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed.

- **TSCA (Toxic Substances Control Act):**

929-06-6 2-(2-aminoethoxy)ethanol: ACTIVE

94441-92-6 beta-Alanine, N-(2-carboxyethyl)-N-(2-ethylhexyl)-, sodium salt (1:1): ACTIVE

2235-43-0 pentasodium hydrogen C,C',C"-nitrilotris(methylphosphonate): ACTIVE

7732-18-5 water, distilled, conductivity or of similar purity: ACTIVE

- **Hazardous Air Pollutants**

None of the ingredients is listed.

- **Proposition 65**

- **Chemicals known to cause cancer:**

None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

- **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

- **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

- **Carcinogenic categories**

- **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

- **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients is listed.

- **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms**



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· **Signal word** Danger· **Hazard-determining components of labeling:**

2-(2-aminoethoxy)ethanol

· **Hazard statements**

Causes severe skin burns and eye damage.

· **Precautionary statements**

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

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/doctor.

Specific treatment (see on this label).

Store locked up.

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

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.**16 Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Department issuing SDS:** Product safety department· **Contact:** support@valcool.com· **Date of preparation / last revision** 10/31/2019 / -· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Skin Corr. 1B: Skin corrosion/irritation – Category 1B

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

· * Data compared to the previous version altered.

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