

**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	3	Health = *3
FIRE	0	Fire = 0
REACTIVITY	0	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 apparats 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/m<sup>3</sup>

- **PAC-2:**

929-06-6 2-(2-aminoethoxy)ethanol: 99 mg/m<sup>3</sup>

- **PAC-3:**

929-06-6 2-(2-aminoethoxy)ethanol: 590 mg/m<sup>3</sup>

## 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:**

· **Flash point:** *Not applicable.*

· **Self-igniting:** *Does not ignite.*

· **Danger of explosion:** *No Danger*

· **Specific Gravity at 20 °C (68 °F):** *1.05 g/cm<sup>3</sup> (8.76225 lbs/gal)*

· **Density:** *N.D.*

· **Evaporation rate:** *Not determined.*

· **Solubility in / Miscibility with**

**Water:** *limited by viscosity*

· **Viscosity:**

**Kinematic:** *Not determined.*

· **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**
- **UN proper shipping name**
- **DOT**
- **Transport hazard class(es)**
- **DOT**



- **Class**
- **Label**
- **Label**
- **Packing group**
- **DOT**
- **Environmental hazards:**
- **Special precautions for user**
- **Danger code (Kemler):**
- **EMS Number:**
- **Stowage Category**
- **Segregation Code**
- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**
- **Transport/Additional information:**
- **DOT**
- **Quantity limitations**
- **ADR**
- **Excepted quantities (EQ)**

UN3055

2-(2-Aminoethoxy) ethanol mixture

8 Corrosive substances

8

8

III

*Not applicable.*
*Warning: Corrosive substances*

80

F-A,S-B

A

SG35 Stow "separated from" SGG1-acids

*Not applicable.*
*On passenger aircraft/rail: 5 L*
*On cargo aircraft only: 60 L*

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.**