Printing date 05/20/2014

Reviewed on 05/20/2014

1 Identification

- · Product identifier
- · Trade name: Triethanolamine
- · Article number: JLM 0640
- CAS Number: 102-71-6
- *EC number:* 203-049-8
- Details of the supplier of the safety data sheet
 Manufacturer/Supplier: Jamson Laboratories, Inc. 101 South Bayview Blvd. Oldsmar, FL 34677 USA



Information department: Product Safety Department
Emergency telephone number: ChemTel Inc. (800) 255-3924 Intl. +01 (813) 248-0585

2 Hazard(s) identification

 Classification of the substance or mixture The substance is not classified according to the Globally Harmonized System (GHS).
 Classification system:

• NFPA ratings (scale 0 - 4)

$$\begin{array}{c} \textbf{Health} = 0\\ Fire = 1\\ Reactivity = 0 \end{array}$$

· HMIS-ratings (scale 0 - 4)

HEALTHImage: 0FIRE1Fire = 1REACTIVITY0Reactivity = 0

- · Other hazards
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.

3 Composition/information on ingredients

- · Chemical characterization: Substances
- · CAS No. Description
- 102-71-6 2,2',2"-nitrilotriethanol
- · Identification number(s)
- · EC number: 203-049-8

4 First-aid measures

· Description of first aid measures

· General information: No special measures required.

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• After inhalation: Supply fresh air; consult doctor in case of complaints.	
• After skin contact: Generally the product does not irritate the skin.	
After eye contact:	
Remove contact lenses if able to do so.	
Rinse opened eye for several minutes under running water.	
· After swallowing:	
A person vomiting while lying on their back should be turned onto their side.	
Do not induce vomiting; immediately call for medical help.	
If symptoms persist consult doctor.	
· Information for doctor:	
· Most important symptoms and effects, both acute and delayed	
Gastric or intestinal disorders	
Cramp	
Nausea	
· Indication of any immediate medical attention and special treatment needed	
No further relevant information available.	

5 Fire-fighting measures

- · Extinguishing media
- Suitable extinguishing agents: Use fire fighting measures that suit the environment.
- · Special hazards arising from the substance or mixture
- Nitrogen oxides (NOx)
- Carbon monoxide (CO)
- In case of fire, the following can be released:
- · Advice for firefighters
- · Protective equipment: Mouth respiratory protective device.

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Not required.
- Environmental precautions:
- Dilute with plenty of water.
- Do not allow to enter sewers/ surface or ground water.
- \cdot Methods and material for containment and cleaning up:
- Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- · 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.

7 Handling and storage

· Handling:

- · Precautions for safe handling No special measures required.
- · Information about protection against explosions and fires: No special measures required.
- · Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: No special requirements.
- Information about storage in one common storage facility: Store away from oxidizing agents.

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Store away from foodstuffs.

• Further information about storage conditions: None.

• 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:

102-71-6 2,2',2''-nitrilotriethanol

TLV Long-term value: 5 mg/m³

• Additional information: The lists that were valid during the creation were used as basis.

- · Exposure controls
- · Personal protective equipment:
- General protective and hygienic measures:
- The usual precautionary measures for handling chemicals should be followed.
- **Breathing equipment:** Not required.
- Protection of hands:

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- · Material of gloves
- Plastic gloves
- Rubber 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.

· 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.

- · Not suitable are gloves made of the following materials: Leather gloves
- Eye protection:
- Safety glasses

Goggles recommended during refilling.

Information on basic physical and a General Information Appearance:	chemical properties	
Form:	Liquid	
Color:	Colorless	
Odor:	Ammonia-like	
Odour threshold:	Not determined.	
pH-value:	Not determined.	
Change in condition		
Melting point/Melting range:	17.9 °C (64 °F)	
Boiling point/Boiling range:	335 °C (635 °F)	
Flash point:	208 °C (406 °F)	

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· Flammability (solid, gaseous):	Not applicable.	
· Ignition temperature:	305 °C (581 °F)	
· Decomposition temperature:	Not determined.	
· Auto igniting:	Not determined.	
· Danger of explosion:	Product does not present an explosion hazard.	
· Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
· Vapor pressure at 20 °C (68 °F):	0.02 hPa	
· Density at 20 °C (68 °F):	1.1287 g/cm³ (9.419 lbs/gal)	
· Relative density	Not determined.	
· Vapour density	Not determined.	
· Evaporation rate	Not determined.	
· Solubility in / Miscibility with		
Water at 20 °C (68 °F):	1.5 g/l	
· Partition coefficient (n-octanol/wate	r): Not determined.	
· Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
Organic solvents:	99.0 %	
Water:	1.0 %	
VOC content:	99.0 %	
	1117.4 g/l / 9.33 lb/gl	
• Other information	No further relevant information available.	

10 Stability and reactivity

- · Reactivity
- · Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · Possibility of hazardous reactions No dangerous reactions known.
- · Conditions to avoid No further relevant information available.
- *Incompatible materials:* No further relevant information available.
- · Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

· Information on toxicological effects

· Acute toxicity:

· LD/LC50 values that are relevant for classification:

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Oral LD50 8000 mg/kg (rat)

- · Primary irritant effect:
- on the skin: No irritant effect.
- on the eye: Irritating effect.

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Trade name: Triethanolamine

· Sensitization: No sensitizing effects known.

• Additional toxicological information:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us. The substance is not subject to classification.

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)

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· NTP (National Toxicology Program)

Substance is not 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: Water hazard class 1 (Assessment by list): slightly hazardous for water Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

- · 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: Smaller quantities can be disposed of with household waste.
- · Uncleaned packagings:
- *Recommendation:* Disposal must be made according to official regulations.
- Recommended cleansing agent: Water, if necessary with cleansing agents.

· UN-Number		
·DOT	Not regulated	
· UN proper shipping name		
DOT	Not regulated	
· Transport hazard class(es)		
DOT	Not applicable	
Packing group		
DOT	Not applicable	

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· Environmental hazards:

• Marine pollutant:

• Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.

· UN "Model Regulation":

Not regulated

15 Regulatory information

 \cdot Safety, health and environmental regulations/legislation specific for the substance or mixture \cdot Sara

No

· Section 355 (extremely hazardous substances):

Substance is not listed.

· Section 313 (Specific toxic chemical listings):

Substance is not listed.

· TSCA (Toxic Substances Control Act):

Substance is listed.

· Proposition 65

· Chemicals known to cause cancer:

Substance is not listed.

· Chemicals known to cause reproductive toxicity for females:

Substance is not listed.

· Chemicalsknown to cause reproductive toxicity for males.

Substance is not listed.

· Chemicals known to cause developmental toxicity:

Substance is not listed.

· Carcinogenic categories

· EPA (Environmental Protection Agency)

Substance is not listed.

· TLV (Threshold Limit Value established by ACGIH)

Substance is not listed.

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

Substance is not listed.

· OSHA-Ca (Occupational Safety & Health Administration)

Substance is not listed.

· 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 MSDS: Environment protection department.

· Date of preparation / last revision 5/20/2014

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Trade name: Triethanolamine

 Abbreviations 	and	acronyms:
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ACGIH: American Conference of Governmental Industrial Hygienists EINECS: European Inventory of Existing Commercial 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 (Contd. of page 6)

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