

Preparation Date 04-06-2010

Revision date 01-21-2016

Revision number 2

1. Identification of the Substance/Preparation and of the Company/Undertaking**Product identifier****Product name** Ethylaminoethanol**Other means of identification****Product code** 51206**Synonyms** Ethanol, 2-(ethylamino)-**Recommended use of the chemical and restrictions on use****Recommended use** Chemical intermediate.**Uses advised against** No information available**Details of the Supplier of the Safety Data Sheet****Supplier Address**

Taminco US LLC
A subsidiary of Eastman Chemical
Company
Two Windsor Plaza, Suite 411
7540 Windsor Drive
Allentown, PA USA 18195
T: +(800) 223-3258

Manufacturer Address

Taminco US LLC
3790 Highway 30
St Gabriel, La USA 70776
(800) 223-3258

Emergency telephone number

Emergency Telephone

In case of emergency call CHEMTREC 1-800-424-9300
for International calls 1-703-527-3887

2. Hazards Identification**Classification****OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 4
Skin corrosion/irritation	Category 1 Sub-category B
Serious eye damage/eye irritation	Category 1
Flammable Liquids	Category 4

Label Elements**Symbols/Pictograms****Signal Word**
DANGER

hazard statements

Harmful if swallowed
Causes severe skin burns and eye damage
combustible liquid

Precautionary Statement - Prevention

Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Do not breathe dust/fume/gas/mist/vapors/spray
Wear protective gloves/protective clothing/eye protection/face protection
Keep away from heat/sparks/open flames/hot surfaces - no smoke

Precautionary Statements - Response

IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician
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
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
Rinse mouth
Do NOT induce vomiting
In case of fire: Use Water spray, fog or regular foam for extinction

Precautionary Statements - Storage

Store locked up
Store in a well-ventilated place. Keep cool

Precautionary Statements - Disposal

P501 - Dispose of contents/container in accordance with local regulation

Hazards Not Otherwise Classified (HNOC)

Not Applicable

3. Composition/information on Ingredients

Synonyms Ethanol, 2-(ethylamino)-.

Chemical name	CAS-No	Weight %	Trade secret
Ethylaminoethanol	110-73-6	>99	No

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First aid measures**First Aid Measures**

General advice	If symptoms persist, call a physician. Show this safety data sheet to the doctor in attendance.
Eye contact	Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes.
Skin contact	Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. If skin irritation persists, call a physician.
Inhalation	Move to fresh air in case of accidental inhalation of vapours or decomposition products. Get medical advice/attention if you feel unwell.

Ingestion If swallowed, rinse mouth with water (only if the person is conscious). Drink 1 or 2 glasses of water. Do not induce vomiting without medical advice.

Protection of First-aiders Use personal protective equipment.

Most Important Symptoms and Effects, Both Acute and Delayed

No information available.

Indication of Any Immediate Medical Attention and Special Treatment Needed

Treat symptomatically.

5. Fire-fighting measures

Suitable extinguishing media

Dry chemical. Alcohol-resistant foam. Carbon dioxide (CO₂). Water spray.

Unsuitable extinguishing media

No information available.

Specific hazards arising from the chemical

Keep product and empty container away from heat and sources of ignition. Risk of ignition.

Explosion data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters

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

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep people away from and upwind of spill/leak. Wear suitable protective equipment. Remove all sources of ignition. It is good practice in industrial hygiene to avoid contact with solvents by using appropriate protective measures whenever possible. Pay attention to flashback. Take precautionary measures against static discharges.

Environmental Precautions

Prevent product from entering drains. Dispose of contents/container in accordance with local regulation.

Methods and material for containment and cleaning up

Use explosion-proof equipment. Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container. Large spills should be collected mechanically (remove by pumping) for disposal. Keep in suitable, closed containers for disposal. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

Large spills should be collected mechanically (remove by pumping) for disposal. Keep in suitable, closed containers for disposal. Suppress (knock down) gases/vapors/mists with a water spray jet. Take precautionary measures against static discharges.

7. Handling and Storage

Precautions for Safe Handling

Use only in area provided with appropriate exhaust ventilation. Wear personal protective equipment. To avoid ignition of vapours by static electricity discharge, all metal parts of the equipment must be grounded. Keep away from heat, sparks and open flame. - No smoking. Do not breathe vapours or spray mist. Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Use product only in closed system.

Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a cool, well-ventilated place. Keep away from heat. Protect from light. Keep in properly labelled containers.

incompatible materials Strong acids and oxidizing agents.

8. Exposure Controls/Personal Protection**Control Parameters**

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Appropriate Engineering Controls

Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment

Eye/Face Protection	Face-shield. Wear a positive-pressure supplied-air respirator with full facepiece.
Skin and Body Protection	Choose body protection according to the amount and concentration of the dangerous substance at the work place. Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.
Respiratory protection	If irritation is experienced, NIOSH approved respiratory protection should be worn. Respiratory protection must be provided in accordance with current local regulations.

General hygiene considerations . Regular cleaning of equipment, work area and clothing.

9. Physical and Chemical Properties**Information on basic physical and chemical properties**

Physical state	liquid	Odor	ammoniacal
appearance	No information available		
color	colorless		

<u>Property</u>	<u>VALUES</u>	<u>Remarks • Method</u>
pH	Alkaline	
Melting point/freezing point	-8 °C / 17.6 °F	
Boiling Point/Range	169.5 °C / 337 °F	
flash point	77 °C / 170.6 °F	PMCC
evaporation rate		
flammability (solid, gas)		
Flammability limit in air		
Upper flammability limit:	No information available	
Lower flammability limit:	No information available	
vapor pressure	0.46 hPa @20°C/68°F	
vapor density	3 (Air =1.0)	
Specific gravity	0.914	
Water solubility	No information available	
Solubility in Other Solvents	No information available	
Partition coefficient	Log Pow : -0.66	
Autoignition temperature	335 °C / 635 °F	
decomposition temperature	No information available	
Kinematic viscosity	No information available	
Dynamic viscosity	No information available mPas	
Explosive properties	Not explosive	
Oxidizing properties	None	

OTHER INFORMATION

molecular weight 89.14
 VOC Content 100%
 density 0.914 g/cm³

10. Stability and Reactivity**Reactivity**

No Data Available

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 away from heat and sources of ignition.

Incompatible materials

Strong acids and oxidizing agents.

Hazardous decomposition products

Heating or fire can release toxic gas. Nitrogen oxides (NO_x). Carbon oxides. Carbon monoxide.

11. Toxicological Information**Symptoms related to the physical, chemical and toxicological characteristics**

Inhalation of vapors is irritating to the respiratory system, may cause throat pain and cough Causes burns to skin and eyes

Product information

LD50/oral/rat = 1073 mg/kg
 LD50/dermal/rat = 3670 mg/kg
 LC50 Inhalation > 2.17 mg/l: An LC50/inhalation/4h/rat could not be determined because no mortality of rats was observed at the maximum achievable concentration

Eye irritation Corrosive
 Skin irritation Corrosive
 sensitization No information available
 Mutagenic effects No information available
 Specific target organ systemic toxicity (single exposure) No information available
 Specific target organ systemic toxicity (repeated exposure) No information available

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen.

Component	ACGIH	IARC	NTP	OSHA
Ethylaminoethanol 110-73-6 (>99)	Not Listed	Not Listed	Not Listed	Not Listed

Chronic toxicity

Avoid repeated exposure.

12. Ecological Information

Ecotoxicity**Product information**

LC50/96h/golden orfe=	147 mg/l
LC50/48h/daphnia =	35 mg/l
Toxicity to Algae	No information available
Toxicity to bacteria	No information available

Persistence/Degradability
READILY BIODEGRADABLE.

Bioaccumulative potential**Mobility in Soil**

No information available

Other Adverse Effects No information available

13. Disposal Considerations**Waste Treatment Methods**

Waste Disposal Method	Dispose of in accordance with local regulations.
Contaminated packaging	Empty containers should be taken for local recycling, recovery or waste disposal.

14. Transport Information**DOT**

Shipping Description	UN2735, Amines, liquid, corrosive, n.o.s. (Ethylaminoethanol), 8, PG II
UN-No	UN2735
Hazard class	8
Packing group	II
Reportable Quantity (RQ)	Not Applicable

IATA

UN-No	UN2735
Proper shipping name	Amines, liquid, corrosive, n.o.s. (Ethylaminoethanol)
Hazard class	8
Packing group	II

IMDG/IMO

UN-No	UN2735
Proper shipping name	Amines, liquid, corrosive, n.o.s. (Ethylaminoethanol)
Hazard class	8
Packing group	II

15. Regulatory Information**International Inventories**

TSCA	Complies
DSL/NDL	Complies
EINECS/ELINCS	Complies
ENCS	Complies
IECSC	Complies
KECL	Complies

PICCS Complies
AICS Complies

Legend:

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

Federal Regulations**SARA TITLE III SECTION 313 INFORMATION:**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazardous**Categorization**

Acute health hazard	Yes
Chronic health hazard	No
Fire hazard	Yes
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals

State Right-to-Know

Chemical name	NJ	Ma	Pa
Ethylaminoethanol 110-73-6	Not Listed	Not Listed	Not Listed

U.S. EPA Label information

EPA Pesticide registration number Not Applicable

WHMIS Hazard Class

B3 Combustible liquid
D2B Toxic materials

CANADA

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR

16. Other Information

NFPA	HEALTH 3	FIRE 2	Instability 0	Physical hazard -
HMIS	HEALTH 3	flammability 2	Physical hazards 0	

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Revision Summary

Not Available

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