



Specialized in chemicals

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Material Safety Data Sheet

Amino Ethyl Ethanolamine

Section 1: Chemical Product and Company Identification

Molecular formula: C₄H₁₂N₂O

CAS Nr: 111-41-1

Molecular weight: 104.15

Synonyms: Aminoethyl Ethanolamine,AEEA,2-(2-Aminoethylamino)ethanol

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Section 2: Composition and Information on Ingredients

Composition:

Name	CAS #	%By Weight
Amino Ethyl Ethanolamine	111-41-1	99.5

Section 3: Hazards Identification

Appearance: colorless liquid

Danger! Corrosive. Hygroscopic. Causes eye and skin burns. May cause severe respiratory tract irritation with possible burns. May cause severe digestive tract irritation with possible burns. May be harmful if swallowed or absorbed through the skin.

Target Organs: No data found.

Potential Health Effects

Eye: Causes eye burns. May cause chemical conjunctivitis and corneal damage.

Skin: Causes skin burns. May be harmful if absorbed through the skin. May cause skin rash (in milder cases), and cold and clammy skin with cyanosis or pale color.

Ingestion: May cause severe and permanent damage to the digestive tract. Causes gastrointestinal tract burns. May cause perforation of the digestive tract. May cause systemic effects.

Inhalation: May cause severe irritation of the respiratory tract with sore throat, coughing, shortness of breath and delayed lung edema. Causes chemical burns to the respiratory tract. Aspiration may lead to pulmonary edema. May cause systemic effects.

Chronic: Effects may be delayed.

Section 4: First Aid Measures

Eyes: Get medical aid immediately. Do NOT allow victim to rub or keep eyes closed. Extensive irrigation with water is required (at least 30 minutes).

Skin: Get medical aid immediately. Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Destroy contaminated shoes.

Ingestion: Do NOT induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

Inhalation: Get medical aid immediately. Remove from exposure to fresh air immediately. If breathing is difficult, give oxygen. Do NOT use mouth-to-mouth resuscitation. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask.

Notes to Physician: Treat symptomatically and supportively.

Section 5: Fire and Explosion Data

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Use water spray to keep fire-exposed containers cool. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas. Containers may explode when heated.

Extinguishing Media: In case of fire, use water, dry chemical, chemical foam, or alcohol-resistant foam. Cool containers with flooding quantities of water until well after fire is out.

Autoignition Temperature:368 deg C (694.40 deg F)
Flash Point: 129deg C (264.20 deg F)
Explosion Limits, lower Not available.
NFPA Rating: (estimated) Health: 2; Flammability: 1; Reactivity: 0

Section 6: Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8. Spills/Leaks:Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Avoid runoff into storm sewers and ditches which lead to waterways. Clean up spills immediately,observing precautions in the Protective Equipment section. Remove all sources of ignition. Provide ventilation.

Section 7: Handling and Storage

Handling:Use only in a well-ventilated area. Do not breathe dust, vapor,mist, or gas. Do not get in eyes, on skin, or on clothing. Keep container tightly closed. Do not ingest or inhale. Discard contaminated shoes.
Storage:Keep container closed when not in use. Corrosives area. Store protected from moisture.

Section 8: Exposure Controls/Personal Protection

Engineering Controls:Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

OSHA Vacated PELs: 2-(2-Aminoethylamino)ethanol: No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes:Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing:Wear appropriate protective clothing to prevent skin exposure.

Respirators:A respiratory protection program that meets OSHA's 29

CFR :1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant a respirator's use.

Section 9: Physical and Chemical Properties

Physical State:	Liquid
Appearance:	colorless liquid
Odor:	none reported
pH:	Not available.
Vapor Pressure:	0.013 mbar @ 20
Vapor Density:	3.59
Evaporation Rate:	Not available.
Viscosity:	Not available.
Boiling Point:	130 deg C @ 12.00MM HG
Freezing/Melting Point:	Not available.
Decomposition Temperature:	
Solubility in water:	slightly soluble
Specific Gravity/Density:	1.0300g/cm3
Molecular Formula:	C4H12N2O
Molecular Weight:	104.15

Section 10: Stability and Reactivity Data

Chemical Stability: Stable under normal temperatures and pressures.

Conditions to Avoid: Ignition sources, excess heat, exposure to moist air or water.

Incompatibilities with Other Materials: Moisture, strong oxidizing agents.

Hazardous Decomposition Products: Nitrogen oxides, carbon monoxide, irritating and toxic fumes and gases, carbon dioxide, nitrogen.

Hazardous Polymerization: Has not been reported.

Section 11: Toxicological Information

RTECS#: CAS#111-41-1: KJ6300000

LD50/LC50:

CAS# 111-41-1: Dermal, guinea pig: LD50 = 1800 uL/kg; Draize test, rabbit, eye:

50 mg Severe; Oral, mouse: LD50 = 3550 mg/kg; Oral, rabbit: LD50 = 2 gm/kg;

Oral, rat: LD50 = 3 gm/kg; Skin, rabbit: LD50 = 3560 uL/kg; Skin, rat: LD50 = 2250

mg/kg.

Carcinogenicity: 2-(2-Aminoethylamino)ethanol - Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

Epidemiology: Mutation data has been reported.

Teratogenicity: No information available.

Reproductive Effects: No information available.

Neurotoxicity: No information available.

Mutagenicity: Mutagenic effects have occurred in experimental animals.

Other Studies: See actual entry in RTECS for complete information.

Section 12: Ecological Information

Not available

Section 13: Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed. RCRA U-Series: None listed.

Section 14: Transport Information

US DOT

Shipping Name: AMINES, LIQUID, CORROSIVE, N.O.S.

Amino Ethyl Ethanolamine

Hazard Class: 8

UN Number: UN2735

Packing Group: II

Canadian TDG

No information available.

Section 15: Other Regulatory Information

US FEDERAL

TSCA

CAS# 111-41-1 is listed on the TSCA inventory.

Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

Section 12b

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

SARA

Section 302 (RQ)

None of the chemicals in this material have an RQ.

Section 302 (TPQ)

None of the chemicals in this product have a TPQ.

SARA Codes

CAS # 111-41-1: acute.

Section 313

No chemicals are reportable under Section 313.

Clean Air Act:

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depleters.

This material does not contain any Class 2 Ozone depleters.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

2-(2-Aminoethylamino)ethanol can be found on the following state

right to know lists: New Jersey, Florida, Pennsylvania,

Massachusetts.

California No Significant Risk Level:

None of the chemicals in this product are listed.

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: C

Risk Phrases: R 34 Causes burns.

Safety Phrases: S 25 Avoid contact with eyes.

S 28A After contact with skin, wash immediately with plenty of water.

S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

WGK (Water Danger/Protection)

CAS# 111-41-1: 1

United Kingdom Occupational Exposure Limits
Canada

CAS# 111-41-1 is listed on Canada's DSL List.

This product has a WHMIS classification of E, D2A.

CAS# 111-41-1 is listed on Canada's Ingredient Disclosure List.

Exposure Limits

CAS# 111-41-1: OEL-RUSSIA:STEL 3 mg/m³;Skin

Section 16: Other Information

References: Not available.

Other Special Considerations: Not available.

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