

Section 1. Product and Company Identification

Product Name N-Aminoethylpiperazine
CAS Number 140-31-8

Parchem - fine & specialty chemicals

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CHEMTEL

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Collect Calls Accepted

Section 2. Hazards Identification

Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Flammable liquids (Category 4): H227

Acute toxicity, Oral (Category 4): H302

Acute toxicity, Dermal (Category 3): H311

Skin corrosion (Category 1B): H314

Serious eye damage (Category 1): H318

Skin sensitization (Category 1): H317

Acute aquatic toxicity (Category 3): H402

Chronic aquatic toxicity (Category 3): H412

GHS Label Elements

Pictograms:



Signal word: DANGER

Hazard and precautionary statements

Hazard statements

H227: Combustible liquid

H302: Harmful if swallowed.

H311: Toxic in contact with skin.

H314: Causes severe skin burns and eye damage.

H317: May cause an allergic skin reaction.

H412: Harmful to aquatic life with long lasting effects.

Precautionary statements

- P210: Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
- P261: Avoid breathing dust/fume/gas/mist/vapors/spray.
- P264: Wash skin thoroughly after handling.
- P270: Do not eat, drink or smoke when using this product.
- P272: Contaminated work clothing should not be allowed out of the workplace.
- P273: Avoid release to the environment.
- P280: Wear protective gloves/protective clothing/eye protection/face protection.
- P301 + P312: If Swallowed: Call a poison center or doctor/physician if you feel unwell.
- P301 + P330 + P331: If Swallowed: rinse mouth. Do not induce vomiting.
- P303 + P361 + P353: if on skin (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/ shower.
- P304 + P340: If Inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P305 + P351 + P338: If In Eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P310: Immediately call a poison center or doctor/ physician.
- P322: Specific measures (see supplemental first aid instructions on this label).
- P333 + P313: If skin irritation or rash occurs: Get medical advice/ attention.
- P361: Remove/Take off immediately all contaminated clothing.
- P363 Wash contaminated clothing before reuse.
- P370 + P378: In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
- P403 + P235: Store in a well-ventilated place. Keep cool.
- P405: Store locked up.
- P501: Dispose of contents/ container to an approved waste disposal plant.

Hazards not otherwise classified (HNOC) or not covered by GHS: None

Section 3. Composition / Information on Ingredients

Common Name N-Aminoethylpiperazine
Synonym(s) 1-(2-Aminoethyl)piperazine, 2-Piperazin-1-ylethylamine
Formula C₆H₁₅N₃
CAS Number 140-31-8

COMPONENT	CAS NUMBER	CONCENTRATION
N-Aminoethylpiperazine	140-31-8	90 – 100%

Section 4. First Aid Measures

Description of first-aid measures

General advice: Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

Inhalation: Move person into fresh air. If not breathing, give artificial respiration. Consult a physician.



Skin contact: Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

Eye contact: Continue rinsing eyes during transport to hospital. Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Ingestion: Do not induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Most important symptoms and effects, both acute and delayed: The most important known symptoms and effects are described in the labelling and/or in section 11.

Indication of any immediate medical attention and special treatment needed: No data available

Section 5. Firefighting Measures

Suitable extinguishing media: Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.

Special hazards arising from the substance or mixture: Carbon oxides, nitrogen oxides (NO_x)

Advice for firefighters: Wear self-contained breathing apparatus for firefighting if necessary.

Further information: Use water spray to cool unopened containers.

Section 6. Accidental Release Measures

Personal precautions, protective equipment, and emergency procedures: Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas. For personal protection see section 8.

Environmental precautions: Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Methods and materials for containment and cleaning up: Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.

Reference to other sections: For disposal see section 13

Section 7. Handling and Storage

Precautions for safe handling: Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Keep away from sources of ignition - No smoking. Take measures to prevent the buildup of electrostatic charge. For precautions see section 2

Conditions for safe storage, including any incompatibilities: Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Section 8. Exposure Controls / Personal Protection

Control parameters

Components with workplace control parameters: Contains no substances with occupational exposure limit values.

Exposure controls

Appropriate engineering controls: Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

Personal protective equipment

Eye/face protection: Tightly fitting safety goggles. Face shield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection: Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection: Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure: Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Section 9. Physical and Chemical Properties

Information on basic physical and chemical properties

Appearance: Clear, colorless, viscous, liquid

Odor: ammonia-like

Odor Threshold: No data available

pH: No data available

Melting point/freezing point: Melting point/range: -19°C (-2°F) at 1,013.0 hPa (759.8 mmHg)

Initial boiling point and boiling range: 218 - 222°C (424 - 432°F)

Flash point (Closed Cup): 92°C (198°F)

Evaporation rate: No data available

Flammability (solid, gas): No data available

Upper/lower flammability or explosive limits

Upper explosion limit: 9.4% (V)

Lower explosion limit: 1.1% (V)

Vapor pressure: 0.05 hPa (0.04 mmHg) at 20 °C (68 °F)

Vapor density: 5.18

Relative density: 0.985 g/mL at 25 °C (77 °F)

Water solubility: 100 g/l at 20°C (68°F) - soluble

Partition coefficient: n-octanol/water: log Pow: -1.48 at 20°C (68°F)

Auto-ignition temperature: > 300°C (> 572°F) at 1,013 hPa (760 mmHg)

Decomposition temperature: No data available

Viscosity: No data available

Explosive properties: No data available

Oxidizing properties: No data available

Other safety information

Dissociation constant: 9.63 at 20.2°C (68.4°F)

Relative vapor density: 5.18

Section 10. Stability and Reactivity

Reactivity: No data available

Chemical stability: Stable under recommended storage conditions.

Possibility of hazardous reactions: No data available

Conditions to avoid: Heat, flames and sparks.

Incompatible materials: Oxidizing agents

Hazardous decomposition products

Other decomposition products: no data available

In the event of fire: see section 5

Section 11. Toxicological Information

Information on toxicological effects

Acute toxicity

LD50 Oral: Rat - male - 2,097 mg/kg

Inhalation: no data available

LD50 Dermal: Rabbit - male - 866 mg/kg

Skin corrosion/irritation

Skin: rabbit

Result: Corrosive - 4 h

Serious eye damage/eye irritation

Eyes: rabbit

Result: Risk of serious damage to eyes

Respiratory or skin sensitization

Maximization Test: guinea pig

Result: May cause sensitization by skin contact. (OECD Test Guideline 406)

Germ cell mutagenicity

Hamster: ovary

Result: negative

Mouse: male and female

Result: negative

Carcinogenicity

IARC: No components of this product, present at levels greater than or equal to 0.1%, is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No components of this product, present at levels greater than or equal to 0.1%, is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No components of this product, present at levels greater than or equal to 0.1%, is identified as a known or anticipated carcinogen by NTP.

OSHA: No components of this product, present at levels greater than or equal to 0.1%, is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity: No data available

Reproductive toxicity: Rat - Oral

Paternal Effects: Spermatogenesis (including genetic material, sperm morphology, motility, and count). No data available

Specific target organ toxicity - single exposure: No data available

Specific target organ toxicity - repeated exposure: No data available

Aspiration hazard: no data available

Additional Information

RTECS: TK8050000

Section 12. Ecological Information

Toxicity to fish

Static test LC50: Pimephales promelas (fathead minnow) - ca. 2,190 mg/l - 96h

Toxicity to daphnia and other aquatic invertebrates

Static test EC50: Daphnia magna (Water flea) - 58 mg/l - 48 h (OECD Test Guideline 202)

Toxicity to algae

EC50: Pseudokirchneriella subcapitata (Selenastrum capricornutum) - 495 mg/l - 72 h (OECD Test Guideline 201)



Toxicity to bacteria

Respiration inhibition EC50: Bacteria - 511 mg/l - 2 h

Persistence and degradability

Biodegradability: Aerobic - Exposure time 28 d

Result: 0 % - Not readily biodegradable. (OECD Test Guideline 301F)

Bio accumulative potential: no data available

Mobility in soil: No data available

Results of PBT and vPvB assessment: PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

Other adverse effects: An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic life with long lasting effects

Section 13. Disposal Considerations

Waste Treatment Methods: Dispose of product and contaminated packaging in accordance with all local, state, and federal environmental control regulations.

Section 14. Transport Information

DOT (US)

UN number: 2815

Class: 8

Packing group: III

Proper shipping name: N-Aminoethylpiperazine

Marine pollutant: No

Poison Inhalation Hazard: No

IMDG

UN number: 2815

Class: 8

Packing group: III

EMS-No: F-A, S-B

Proper shipping name: N-Aminoethylpiperazine

Marine pollutant: No

IATA

UN number: 2815

Class: 8

Packing group: III

Proper shipping name: N-Aminoethylpiperazine



Section 15. Regulatory Information

SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards: Fire Hazard, Acute Health Hazard

Massachusetts Right to Know Components

2-Piperazin-1-ylethylamine (CAS-No. 140-31-8)

Pennsylvania Right to Know Components

2-Piperazin-1-ylethylamine (CAS-No. 140-31-8)

New Jersey Right to Know Components

2-Piperazin-1-ylethylamine (CAS-No. 140-31-8)

California Prop. 65 Components: This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

HMIS Rating

Health hazard: 3

Flammability: 2

Physical Hazard: 0

NFPA Rating

Health hazard: 3

Fire Hazard: 2

Reactivity Hazard: 0

Section 16. Other Information

Disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.

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