(N- Amylamine)



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SECTION 1 – PRODUCT AND COMPANY INFORMATION

PRODUCT NAME N- Amylamine

SYNONYM Pentylamine; 1-Aminopentane

FORMULA C5H13N CAS NUMBER 110-58-7

SECTION 2 – COMPOSITON/INFORMATION ON INGREDIENTS

PRODUCT NAMECAS NUMBERPURITYN- Amylamine110-58-7100%

SECTION 3- HAZARDS IDENTIFICATION

Emergency Overview

OSHA Hazards

Flammable Liquid, Toxic by ingestion, Harmful by skin absorption., Corrosive

HMIS Classification

Health Hazard: 3 Flammability: 3 Physical hazards: 0

NFPA Rating

Health Hazard: 3 Fire: 3 Reactivity Hazard: 0

Potential Health Effects

Inhalation May be harmful if inhaled. Material is extremely destructive to the tissue of the

mucous membranes and upper respiratory tract.

Skin Harmful if absorbed through skin. Causes skin burns.

Eyes Causes eye burns.

Ingestion Toxic if swallowed. Causes burns.

SECTION 4 - FIRST AID MEASURES

General advice

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

If inhaled

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If breathed in, move person into fresh air. If not breathing give artificial respiration Consult a physician.

In case of skin contact

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

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

If swallowed

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

SECTION 5 – FIRE FIGHTING MEASURES

Flammable properties

Flash point 1 °C (34 °F) - closed cup Ignition temperature no data available

Suitable extinguishing media

For small (incipient) fires, use media such as "alcohol" foam, dry chemical, or carbon dioxide. For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be ineffective. Cool all affected containers with flooding quantities of water.

Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

Further information

Use water spray to cool unopened containers.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Personal precautions

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods for cleaning up

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

SECTION 7- HANDLING AND STORAGE

Handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

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Keep away from sources of ignition - No smoking. Take measures to prevent the build up of electrostatic charge.

Storage

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. Store in cool place. Store under inert gas. Sensitive to carbon dioxide

SECTION 8 - EXPOSURE CONTROLS/ PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

Personal protective equipment

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose 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).

Hand protection

Handle with gloves.

Eye protection

Safety glasses

Skin and body protection

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form clear, liquid Colour colourless

Safety data

pH no data available Melting point -50 °C (-58 °F) Boiling point 104 °C (219 °F)

Flash point $1 \, ^{\circ}\text{C} \, (34 \, ^{\circ}\text{F})$ - closed cup

Ignition temperature no data available

Lower explosion limit 2.2 %(V) Upper explosion limit 22 %(V)

Density 0.752 g/mL at 25 °C (77 °F)

Water solubility soluble Relative vapour 3.01

Density - (Air = 1.0)

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SECTION 10 – STABILITY AND REACTIVITY DATA

Storage stability

Stable under recommended storage conditions.

Conditions to avoid

Heat, flames and sparks.

Materials to avoid

acids, Acid chlorides, Acid anhydrides, Strong oxidizing agents, Carbon dioxide (CO2)

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NOx)

Hazardous reactions

Vapours may form explosive mixture with air.

SECTION 11 – TOXICOLOGICAL INFORMATION

Acute toxicity

LD50 Oral - rat - 470 mg/kg LC50 Inhalation - rat - 4 h - 2000 ppm LD50 Dermal - rabbit - 1,120 mg/kg

Irritation and corrosion

Skin - rabbit - Severe skin irritation Eyes - rabbit - Severe eye irritation

Sensitisation

no data available

Chronic exposure

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

Signs and Symptoms of Exposure

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin., Cough, Shortness of breath, Headache, Nausea

Potential Health Effects

Inhalation May be harmful if inhaled. Material is extremely destructive to the tissue of the

mucous membranes and upper respiratory tract.

Skin Harmful if absorbed through skin. Causes skin burns.

Eyes Causes eye burns.

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SECTION 12 - ECOLOGICAL INFORMATION

Elimination information (persistence and degradability)

Ecotoxicity effects

Toxicity to fish LC50 - Pimephales promelas (fathead minnow) - 177 mg/l - 96 h

Toxicity to daphnia and other aquatic invertebrates. EC50 - Daphnia magna (Water flea) - 56 mg/l - 48 h

Further information on ecology

no data available

SECTION 13 - DISPOSAL CONSIDERATION

Product

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Observe all federal, state, and local environmental regulations. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging

Dispose of as unused product.

SECTION 14 - TRANSPORTATION DATA

DOT (US)

UN-Number: 1106 Class: 3 (8) Packing group: II

Proper shipping name: Amylamines

Marine pollutant: No

Poison Inhalation Hazard: No

IMDG

UN-Number: 1106 Class: 3 (8) Packing group: II EMS-No: F-E, S-C

Proper shipping name: AMYLAMINES

Marine pollutant: No

IATA

UN-Number: 1106 Class: 3 (8) Packing group: II

Proper shipping name: Amylamine

SECTION 15 – REGULATORY INFORMATION

OSHA Hazards

Flammable Liquid, Toxic by ingestion, Harmful by skin absorption., Corrosive

DSL Status

All components of this product are on the Canadian DSL list.

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

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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

Pentylamine CAS-No. 110-58-7 Revision Date 1991-07-01

Pennsylvania Right To Know Components

Pentylamine CAS-No. 110-58-7 Revision Date 1991-07-01

New Jersey Right To Know Components

Pentylamine CAS-No. 110-58-7 Revision Date 1991-07-01

California Prop. 65 Components

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

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.