

SAFETY DATA SHEET

SECTION 1 · PRODUCT IDENTIFICATION

PRODUCT

Product Name: AMINOPROPYLMORPHOLINE (APM)
Control Number: 00260
Product Description: Intermediate

COMPANY IDENTIFICATION

Supplier: Chemical Distribution Solutions
1125 Oak St. Ste. 303
Conway, AR 72032

24 Hour Emergency Telephone: (800) 424-9300 CHEMTREC
General Information: (501) 978-1111

SECTION 2· HAZARDS IDENTIFICATION

GHS Classification:

[Health]

[Environmental]

[Physical]

Acute toxicity, Dermal Category 4
Skin corrosion Category 1B
Serious eye damage Category 1

GHS Label elements, including precautionary statements

Pictograms



Signal Word: Danger

Hazard Phrases:

H302 Harmful if swallowed
H312 Harmful in contact with skin.
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
H322 Harmful if inhaled

Precautionary Phrases:

P264 Wash skin thoroughly after handling.
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
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.

SECTION 3 · COMPOSITION / INFORMATION ON INGREDIENTS

CHEMICAL NAME	CAS Number	%Volume
4-(3-Aminopropyl)morpholine	123-00-2	60-100

SECTION 4 - FIRST AID MEASURES

FIRST AID PROCEDURES:

Inhalation: Move to fresh air. If breathing is difficult, give oxygen. Seek immediate medical attention/advice.

Skin contact: Take off all contaminated clothing. Wash contact area with soap and water. Seek immediate medical attention/advice.

Eye contact: Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek immediate medical attention/advice.

Ingestion: Do not induce vomiting. Immediately rinse mouth and drink plenty of water. Never give anything by mouth to an unconscious person. Seek immediate medical attention/advice.

SECTION 5 - FIRE FIGHTING MEASURES

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

Hazardous combustion products: Oxides of carbon and nitrogen.

Fire Fighting Procedures: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear.

Unusual Fire and Explosion Hazards: Containers can build up pressure if exposed to heat and/or fire. Use water spray to keep fire-exposed containers cool. Containers may rupture in the heat of a fire.

SECTION 6 - ACCIDENTAL RELEASE and DISPOSAL MEASURES

Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb spill with inert material, then place in a chemical waste container. Following product recovery, flush area with water.

Small Spills: Absorb spill with vermiculite or other inert material. Clean surface thoroughly to remove residual contamination.

SECTION 7 - STORAGE AND HANDLING

Precautions: Store in a cool, dry, ventilated area, away from incompatible substances. Store only in approved properly labeled containers. Keep container closed and tightly sealed when not in use. Do not get in eyes, on skin, or on clothing. Do not taste or swallow. Do not breathe mist or vapor. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION

Engineering Controls: Provide ventilation or other engineering controls to keep the airborne concentrations of vapor or mists below the applicable workplace exposure limits indicated below. The level of protection and types of controls will vary depending upon potential exposure conditions.

Exposure Limits: Aminopropylmorpholine 2 mg/kg ACGIH 2 mg/kg OSHA

Personal Protective Equipment (PPE):

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

Skin: If prolonged or repeated skin contact is likely, wear appropriate protective gloves.

Clothing: Selection of protective clothing depends on work conditions.

Respirators: Where adequate ventilation is not available an approved respirator must be worn. Respirator selection, should be in accordance with the requirements of OSHA Respiratory Protection Standard, 29 CFR 1920.134. In confined spaces, use a self-contained breathing apparatus.

Other Equipment: Adequate local ventilation to control airborne concentrations below the exposure limits. Eye wash station and shower in close proximity to use are advised.

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SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Flash Point: 212 °F
Autoignition Temperature: No available data
Boiling Point: 436 °F
Melting Point/Freezing Point: 5 °F
Vapor Pressure: 0.06 mmHg
Vapor Density (Air-1): 5.1
Odor/Appearance: Colorless liquid with ammonia like odor

Flammability Limits: No available data
Specific Gravity: 0.99
Volatile %: No available data
Evaporation Rate (BuAc=1): No available data
pH: 12
Solubility in Water: Soluble

SECTION 10 - STABILITY AND REACTIVITY

Chemical Stability: Stable under normal use and temperature conditions.
Conditions to Avoid: Incompatibles.
Materials to Avoid: Strong acids, acid chlorides, acid anhydrides, oxidizing agents, chloroformates.
Decomposition Products: Oxides of carbon and nitrogen.

SECTION 11 - TOXICOLOGICAL INFORMATION

Signs and Symptoms of Overexposure:
Ingestion: Causes digestive tract burns. Harmful if swallowed.
Inhalation: May cause irritation to the respiratory system.
Skin contact: Causes severe skin burns.
Eye contact: Causes severe eye burns. Causes serious eye damage.

Acute oral toxicity:
Aminopropylmorpholine: LD50 rat: 1790 mg/kg
Acute inhalation toxicity:
Aminopropylmorpholine: LC50 rat: No available data
Acute dermal toxicity:
Aminopropylmorpholine: LD50 Rabbit: 2298 mg/kg

SECTION 12 - ECOLOGICAL INFORMATION

Aquatic Toxicity: LC50 - Oncorhynchus mykiss (rainbow trout) - 45.4 mg/l - 96 h
Bio-accumulative potential: Possible hazardous degradation products are not likely.
Persistence and degradability: This material is not expected to persist.
Mobility: No Available Data.

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.

SECTION 14 - TRANSPORTATION

U.S. DEPARTMENT OF TRANSPORTATION (Road or Rail):

Proper Shipping Name: Amines, liquid, corrosive, n.o.s. (4-morpholinepropanamine)
Hazard Class: 8
UN Number: 2735
Packaging Group: 2

SECTION 15 - REGULATORY INFORMATION

US FEDERAL REGULATIONS

Comprehensive Environmental Response and Liability Act (CERCLA)

This material is not subject to any special reporting under the requirements of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA).

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302. The reportable quantity (RQ) for this material has not been established.

Toxic Substance Control Act (TSCA): All components of this product are listed on the TSCA inventory list.

SARA Section 311/312 (40 CFR 370) Hazard Categories:

Acute Health Hazard

SARA Section 313 (40 CFR 372) Hazard Categories:

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.

Clean Water Act: None of the chemicals in this product are listed as Hazardous Substances under the CWA

Clean Air Act: None of the chemicals in this product are listed as Hazardous Substances under the CAA.

California Prop 65: This product contains no chemicals known by the State of California to cause cancer, birth defects or other reproductive harm.

SECTION 16 - OTHER INFORMATION

MSDS Creation Date: March 2015

National Fire Protection Association (NFPA) Ratings: This information is intended solely for the use of individuals trained in the NFPA system.

Health: 3

Flammability: 1

Reactivity: 0

The data in this Safety Data Sheet relates to the specific material designated and does not relate to its use in combination with any other material or process. The data contained is believed to be correct. However, since conditions of use are outside our control it should not be taken as warranty or representation for which Chemical Distribution Solutions assumes legal responsibility. This information is provided solely for your consideration, investigation, and verification.