3-METHOXYPROPYLAMINE, 99.5%

Safety Data Sheet

NORTH Metal and Chemical Co.

1. Company Identification and Product Hazard Overview:

Product Name : 3-Methoxypropylamine

Synonyms : 3-Methoxy-1-aminopropane; 3-Methoxypropyl-1-amine; 1-Amino-3-methoxypropane; 3-Aminopropyl methyl ether; MOPA.

Recommended Use : Corrosion inhibitor, intermediate in flooring finishes, water treatment products.

Manufactured for : **NORTH Metal and Chemical Company**

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In Case of Emergency: Call CHEMTREC (24H): 1-800-424-9300

2. Hazard Identification:

GHS Classification:
Flammable Liquids (Category 3)
Acute Toxicity, Oral (Category 4)
Skin Corrosion/Toxicity (Category 1A, B, C)
Serious Eye Damage and Irritation (Category 1)
Skin Sensitization (Category 1)

Signal Word: DANGER
Pictograms: Flammable, Corrosion, Acute Toxicity

Hazard Statements:

H226 : Flammable liquid and vapor
H302 : Harmful if swallowed.
H314 : Causes severe skin burns and serious eye damage.
H317 : May cause allergic skin reaction.
H402 : Harmful to aquatic life.

Safety Precautions:

P210 : Keep away from heat/sparks/open flames/hot surfaces - No smoking
P233 : Keep container tightly closed
P241 : Use explosion-proof electrical/ventilating/lighting equipment
P242 : Use only non-sparking tools
P243 : Take precautionary measures against static discharge

2. Hazard Identification:

Response:

P301 + P312 + P330	**:** IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse the mouth
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 + P310	**:** IF INHALED: Remove person to fresh air and keep in position comfortable for breathing. Immediately call a poison center or doctor/physician.
P305 + P351 + P338 + P310	**:** 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.
P333 + P313	**:** IF skin irritation or rash occurs: Get medical advice/attention.
P403 + P235 + P405	**:** Store in a well-ventilated place. Keep cool. STORE LOCKED UP.

Disposal:

P501	**:** Dispose of contents/container in accordance with local/state/federal regulations.

General Information:
Appearance: clear, colorless liquid. Flash Point: 32 deg C.
Causes eye and skin burns. Causes digestive and respiratory tract burns. Flammable liquid and vapor. Air sensitive. Hygroscopic (absorbs
moisture from the air).
Target Organs: Eyes, skin, mucous membranes.

Potential Health Effects:
Eye: Causes eye burns. May cause blindness.
Skin: Causes skin burns. May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material. May be harmful if absorbed through the skin.
Ingestion: May cause severe and permanent damage to digestive tract.
Inhalation: Causes chemical burns to the respiratory tract. Inhalation may cause severe irritation to the respiratory tract with sore throat, coughing, labored breathing and possible pulmonary edema.
Chronic: No information found.

3. Composition/Information on Ingredient:

Chemical Name	**: 3-Methoxypropylamine**
Chemical Family	**:** Amines
Chemical Formula	**:** $C_4H_{11}NO$

Substance:	CAS Number:	EC	Compo. (%)
3-Methoxypropylamine	5332-73-0	226-241-3	>99.5%

4. First Aid Measures:

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

Eyes : In case of contact, immediately flush eyes for at least 15 minutes. Get medical aid immediately.

Skin : in case of contact, remove contaminated clothing and shoes. Wash contaminated skin with plenty of running water and soap for at least 15 minutes. Get medical aid immediately. Wash clothing before reuse.

Ingestion : If, swallowed, do **NOT** induce vomiting. Get medical aid immediately. If the victim is conscious, give a cupful of water to drink. Never give anything by mouth to an unconscious person.

Inhalation : If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

Note to Physician : Treat symptomatically and supportively.

5. Fire Fighting Measures:

Flash Point (°C) : 27.22°C (81°F)

Flammable Limits : Upper explosion limit: N/A; Lower explosion limit: N/A

Auto ignition Temp. : 320 deg C (608.00 deg F)

Flammable Class : Not available.

General Hazard : As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors may form an explosive mixture with air. 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.

Containers may explode in the heat of a fire. Flammable liquid and vapor. Approach fire from upwind to avoid hazardous vapors and toxic decomposition products. Vapors are heavier than air and may travel to a source of ignition and flash back. Vapors can spread along the ground and collect in low or confined areas.

Extinguishing Media : For small fires, use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide. For large fires, us water spray, fog, or alcohol-resistant foam. Water may be ineffective. Do **NOT** use straight streams of water.

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. Clean up spills immediately, observing precautions in the Protective Equipment section. Remove all sources of ignition. Use a spark-proof tool. Provide ventilation. A vapor suppressing foam may be used to reduce vapors. Approach spill from upwind.

7. Handling and Storage:

Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Ground and bond containers when transferring material. Use spark-proof tools and explosion proof equipment. Do not get in eyes, on skin, or on clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Keep away from heat, sparks and flame. Discard contaminated shoes. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames. Use only with adequate ventilation. Do not breathe vapor or mist.

Storage: Keep away from sources of ignition. Store in a cool, dry, well-ventilated area away from incompatible substances. Flammables-area. Store protected from moisture. Store in air tight containers. Should not be exposed to temperatures above 122 degree.

8. Exposure Controls and Personal Protection:

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use process enclosure, local exhaust ventilation, or other engineering controls to control airborne levels.

Exposure Limits:

Chemical Name	ACGIH	NIOSH	OSHA-FINAL PELs
3-Methoxypropylamine	None Listed	None Listed	None Listed

Personal Protective Equipment:

Eyes: Wear chemical splash goggles and face shield.

Skin: Wear appropriate protective gloves to prevent skin exposure. Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respiratory: Wear a NIOSH/MSHA or European Standard EN 149 approved full-facepiece airline respirator in the positive pressure mode with emergency escape provisions.

Work Hygienic Practices : Facilities storing or using this material should be equipped with emergency eyewash, and a safety shower. Good personal hygiene practices should always be followed.

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.

9. Chemical and Physical Properties:

Appearance	: Liquid	**Viscosity @ 20°C**	: 0.8 mPa
Odor	: Amine-like, ammonia-like, strong odor, malodorous	**Decomposition Temp.** **Evaporation Rate**	: Not available : Not available
Odor threshold	: Not available	**Lower Explosive Limit**	: 1.4% (V)
Color	: Clear, Colorless	**Upper Explosive Limit**	: 11.7% (V)
pH	: 11.4-11.9	**Vapor Pressure**	: 21.7 mmHg @ 25°C
Melting Point	: Not available	**Vapor Density**	: 3.07 (Air = 1.0)
Freezing Point	: -65°C	**Solubility**	: Soluble
Boiling Point	: 118°C @760 mm Hg		
Flash Point	: 81°F	**Molecular Weight**	: 89.14

10. Stability and Reactivity:

Stability	**:** Stable under normal temperatures and pressures. Amines absorb carbon dioxide from the air to form carbamate salts.
Conditions to Avoid	**:** Ignition sources, moisture, excess heat, prolonged exposure to air, mixing with incompatibles.
Incompatible Materials	**:** Strong oxidizing agents, Strong acids, aldehydes. Copper, Zinc, and Iron. Do not store near acids.
Hazardous Decomposition Products	**:** Nitrogen oxides, carbon monoxide, carbon dioxide.
Possibility of Hazardous Reactions	**:** No data available

11. Toxicological Information:

RTECS#:

CAS# 5332-73-0: UI3335000

LD50/LC50: Not available. Weak allergic skin reactions were observed in guinea pigs following repeated exposure. (Atofina)

Carcinogenicity: CAS# 5332-73-0: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: No information available.

Teratogenicity: No information available.

Reproductive Effects: No information available.

Mutagenicity: No information available.

Neurotoxicity: No information available.

12. Ecological Information:

NO INFORMTAION AVAILABLE.

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 USeries: None listed.

14. Transport Information:

Regulatory Information	UN No.	Proper Shipping Name	UN Class	Packing Group	Labels
US DOT	2734	Amine, liquid, corrosive, flammable, N.O.S (3-Methoxypropylamine)	8 (3)	I	Corrosive Sticker Flammable Sticker N.O.S.
CANADA TDG	2734	Amine, liquid, corrosive, flammable, N.O.S (3-Methoxypropylamine)	8 (3)	I	Corrosive Sticker Flammable Sticker NOS(3 Methoxypropylamine)

15. Regulatory Information:

U.S. Federal Regulations:

TSCA: CAS# 5332-73-0 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.

CERCLA Hazardous Substances and corresponding RQs: None of the chemicals in this material have an RQ.

SARA Section 302 Extremely Hazardous Substances: None of the chemicals in this product have a TPQ.

SARA Codes: CAS # 5332-73-0: immediate, fire.

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 depletors. This material does not contain any Class 2 Ozone depletors.

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: CAS# 5332-73-0 can be found on the following state right to know lists: Pennsylvania, Minnesota, Massachusetts.

California Prop 65: No Significant Risk Level: None of the chemicals in this product are listed.

15. Regulatory Information, continued:

European/International Regulations:

European Labeling in Accordance with EC Directives

Hazard Symbols:
C
Risk Phrases:
R 10 Flammable.
R 34 Causes burns.

Safety Phrases:
S 16 Keep away from sources of ignition - No smoking.
S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S 33 Take precautionary measures against static discharges.
S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.
S 9 Keep container in a well-ventilated place.

WGK (Water Danger/Protection):
CAS# 5332-73-0: 1
Canada - DSL/NDSL
CAS# 5332-73-0 is listed on Canada's DSL List.
Canada - WHMIS
This product has a WHMIS classification of E, B2.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations. Canadian Ingredient Disclosure List

16. Other Information:

HMIS: Hazardous Materials Identification System

Numeric Scale for Health (Blue), Flammability (Red), and Physical Hazard (Yellow):

HMIS Rating:*

HEALTH	3
FLAMMABILITY	3
PHYSICAL HAZARD	0
PERSONAL PROTECTION	C

RATING	HEALTH	FIRE HAZARD	PHYSICAL HAZARD
0	No significant risk to health	Will not burn	Product stable under ambient temperature and condition.
1	Can cause irritation or minor reversible injury.	Must be preheated to burn	Product can become unstable at high temperatures and pressures.
2	Can cause temporary or residual injury	Ignites when moderately heated	Product can become unstable and cause violent chemical reaction at normal pressures and temperatures
3	Can cause serious injury	Ignition occurs at normal temperature	Product capable of forming explosive mixtures and is capable of detonation in presence of strong initiating source.
4	Can be lethal from single or repeated exposure.	Extremely flammable	Product is highly explosive and unstable. Exothermic reactions possible with decomposition, polymerization, reaction with water or self reaction

Personal Protection Code C: Gloves + Safety Goggles + Chemical Apron

16. Other Information, continued:

NFPA: National Fire Protection Association

Numeric Scale for Health (Blue), Fire Hazard (Red), and Reactivity (Yellow):
Special (White)

NFPA Rating:*

HEALTH	3
FIRE HAZARD	3
PHYSICAL HAZARD	0
PERSONAL PROTECTION	C

RATING	HEALTH	FIRE HAZARD	REACTIVITY
0	Minimal Hazard	Will not burn	Normally Stable
1	Can cause significant irritation	Must be preheated to burn	Unstable at high temperatures
2	Can cause temporary incapacitation or residual injury	Ignites when moderately heated	Normally unstable. Can readily go under violent chemical reaction but do not detonate.
3	Can cause permanent injury.	Ignition occurs at normal temperature	Capable of detonation, or of explosive reaction, but requires a strong ignition source.
4	Can be lethal.	Extremely flammable	May explode at normal temperatures and pressures

Revision Date: February 7, 2024
Reason for Revision: Corrected proper shipping name in section 14

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