



1. Identification of the substance

Chemical Name: CarbonTrap
Chemical Name: 3-Methoxypropylamine, 99+%
Synonyms: 3-Methoxy-1-aminopropane; 3-Methoxypropyl-1-amine;
 1-Amino-3-methoxypropane; 3-Aminopropyl methyl ether;
 MOPA.
Product Code: CT
Supplier: Meridian
 5 West Street
 EPSOM
 Surrey KT18 7RL
 Telephone: 01372 749783
 Fax: 01372 720265

2. Composition

CAS#	Chemical Name	Percent	EINECS/ELINCS
5332-73-0	3-Methoxypropylamine	>99	226-241-3

Hazard Symbols: C Corrosive
Risk Phrases: R10 Flammable
 R35 Causes severe burns

3. Regulatory Information

Classification & Symbols



Safety Phrases

R 10 Flammable
R 35 Causes Severe Burns

Material Safety Data Sheet

Danger Causes eye and skin burns. Causes digestive and respiratory tract burns. Flammable liquid and vapour. 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 the digestive tract.

Inhalation: Causes chemical burns to the respiratory tract. Inhalation may cause severe irritation to the respiratory tract with sore throat, coughing, laboured breathing, and possible pulmonary oedema.

Chronic: No information found.

4. First Aid Measures

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

Skin: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid immediately. Wash clothing before reuse.

Ingestion: If swallowed, do NOT induce vomiting. Get medical aid immediately. If victim is fully conscious, give a cupful of water. 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.

Notes to Physician: Treat symptomatically and supportively.

5. Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapours 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 vapour. Approach fire from upwind to avoid hazardous vapours and toxic decomposition products. Vapours are heavier than air and may travel to a source of ignition and flash back. Vapours can spread along the ground and collect in low or confined areas.

Material Safety Data Sheet

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

Flash Point: 27 deg C (81 deg F)

Auto-ignition Temperature: 320 deg C (608 deg F)

Explosion Limits: Lower: N/A **Upper:** N/A

NFPA Rating: (estimated) Health: 3; Flammability: 3; Instability: 0

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 vapour suppressing foam may be used to reduce vapours. 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 vapour), 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 vapour 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°F (50°C).

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

OSHA Vacated PELs: 3-Methoxypropylamine: No OSHA Vacated PELs are listed for this chemical.

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

9. Physical and chemical properties

Physical State: Liquid
Appearance: Clear, colourless
Odour: amine-like - ammonia-like - strong odour - malodorous
pH: 11.4-11.9
Vapour Pressure: 21.7 mm Hg @ 25 deg C
Vapour Density: 3.07 (air=1)
Evaporation Rate: Not available.
Viscosity: 0.8 mPa @ 20 deg C
Flash Point: 27 deg C (81 degF)
Boiling Point: 118 deg C @ 760 mm Hg
Freezing/Melting Point: -65 deg C
Decomposition Temperature: Not available.
Solubility: Soluble.
Specific Gravity/Density: 0.870 g/ml
Molecular Formula: C₄H₁₁NO
Molecular Weight: 89.12

10. Stability and Reactivity

Chemical 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.

Incompatibilities with Other Materials: Strong oxidizing agents, strong acids, aldehydes.

Hazardous Decomposition Products: Nitrogen oxides, carbon monoxide, carbon dioxide.

Hazardous Polymerization: Will not occur.

11. Toxicological Information

CAS# 1310-73-2

RTECS Number: WB4900000

Routes of Exposure: Eye contact. Ingestion. Inhalation. Skin contact.

Toxicity Data: Ipr-Mus LD₅₀: 40 mg/kg

Irritation Data: Eye-Mky 1%/24h sev Skn-Rbt 500 mg/24h sev Eye-Rbt 400 µg mld

Chronic Toxic Effects: This product has no known chronic effects. Repeated or prolonged exposure to this compound is not known to aggravate medical conditions.

Acute Toxic Effects: Harmful if swallowed, inhaled, or absorbed through skin. Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes and skin. Inhalation may be fatal as a result of spasm, inflammation and oedema of the larynx and bronchi, chemical pneumonitis and pulmonary oedema. Symptoms of exposure may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea and vomiting.

CAS-# 61788-90-7

Acute oral toxicity (LD₅₀): >2,000 mg/Kg (rat)

Skin irritation: Irritating (rabbit)

Eye Irritation: Corrosive (rabbit)

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.

Other Studies:

12. Ecological information

No information 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 U-Series: None listed.

14. Transport Information

	US DOT	Canada TDG
Shipping Name:	CORROSIVE LIQUID FLAMMABLE, N.O.S.	CORROSIVE LIQUID FLAMMABLE N.O.S. (3 METHOXYPROPYLAMINE)
Hazard Class:	8	8(3)
UN Number:	UN2734	UN2734
Packing Group:	II	II

ADR/RID:

Label:



ADR/RID class:

8 Corrosive Substances

Item:

47b

Danger Code (Kemler):

80

UN Number:

2734

Description of goods:

Corrosive liquid, amines, flammable, N.O.S. 3-methoxypropylamine

IMDG:**Label:****IMDG class:**

8

Page:

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UN Number:

2734

Packing group:

II

EMS Number:

8 -15

MFAG:

760

Marine pollutant:

No

Proper shipping name:

Corrosive liquid, amines, flammable, N.O.S. 3-methoxypropylamine

IATA-DGR & ICAO-TI**Label:****ICAO-IATA class:**

8

UN/ID number:

2734

Packing group:

II

Proper shipping name:

Corrosive liquid, amines, flammable, N.O.S. 3-methoxypropylamine

15. Regulatory Information**US FEDERAL****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 and Massachusetts.

California Prop 65

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 F

Material Safety Data Sheet

Risk Phrases:

- R 10 Flammable.
- R 35 Causes severe burns.

Safety Phrases:

- S 9 Keep container in a well-ventilated place.
- 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.

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

The information above is believed to be accurate and represents the best currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use.

Users should carry out their own investigation to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.