

SECTION 1 - IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**1.1 Product identifiers**

Product name: N-Methyl-tert-butylamine

EC number: 238-646-2

CAS-No.: 14610-37-8

Product Code: GEO-01792

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Laboratory chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet:

Georganics Ltd., Koreničova 1, 811 03 Bratislava, Slovak Republic

Phone Number: +421 33 6403132, E-mail address: georganics@georganics.sk

1.4 Emergency telephone number: National Toxicological Information Centre, Tel: +421-2-54774166, Mob: +421 911 166 066**SECTION 2 - HAZARDS IDENTIFICATION****2.1 Classification of the substance or mixture****2.1.1 Classification according to Regulation (EC) No 1272/2008 (CPL)**

Flammable liquids (Category 2) H225

Acute toxicity, oral, acute toxicity, dermal and acute toxicity, inhalation (Category 4) H302+H312+H332

Skin corrosion/irritation (Category 1A, 1B, 1C) H314

Serious eye damage/eye irritation (Category 1) H318

2.1.2 Additional information: For full text of Hazard- and EU Hazard-statements: see SECTION 16.**2.2 Label elements**

Labelling according Regulation (EC) No 1272/2008

Hazard pictogram:**Hazard statements:**

H225-Highly flammable liquid and vapour.

H302+H312+H332-Harmful if swallowed, in contact with skin or if inhaled.

H314-Causes severe skin burns and eye damage.

Signal word:**Danger****Precautionary statements:**

P210-Keep away from heat/sparks/open flames/hot surfaces. — No smoking.

P233-Keep container tightly closed.

P240-Ground/bond container and receiving equipment.

P241-Use explosion-proof electrical/ventilating/lighting/.../equipment.

P242-Use only non-sparking tools.

P243-Take precautionary measures against static discharge.

P261-Avoid breathing dust/fume/gas/mist/vapours/spray.

P264-Wash ... thoroughly after handling.

P270-Do not eat, drink or smoke when using this product.

P271-Use only outdoors or in a well-ventilated area.

P280-Wear protective gloves/protective clothing/eye protection/face protection.

P301+P312+P330-IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.

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 comfortable for breathing. Immediately call a POISON CENTER/ doctor.

P305+P351+P338-IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P362-Take off contaminated clothing and wash before reuse.

P370+P378-In case of fire: Use ... for extinction.

P403+P235-Store in a well-ventilated place. Keep cool.

P405-Store locked up.

P501-Dispose of contents/container to ...

2.3 Other hazards**Supplemental Hazard information (EU):** Not applicable

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3 - COMPOSITION, INFORMATION ON INGREDIENTS**3.1 Substances**

| Identification numbers | Substance name | Concentration | Classification according to Regulation (EC) No 1272/2008 | SCL / M-factor / ATE |
|----------------------------------|--------------------------|---------------|--|----------------------|
| CAS: 14610-37-8 EC: 238-646-2 | N-Methyl-tert-butylamine | <= 100% | H225;H302+H312+H332;H314; | - |

SECTION 4 - FIRST AID MEASURES**4.1 Description of first aid measures**

| | |
|--------------------------------|---|
| General notes | Consult a physician. Show this safety data sheet to the doctor in attendance. |
| If inhaled | If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician. |
| In case of skin contact | Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician. |
| In case of eye contact | 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. |

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5 - FIREFIGHTING MEASURES**5.1 Extinguishing media**

Suitable extinguishing media: alcohol-resistant foam, dry chemical or carbon dioxide

Unsuitable extinguishing media: -no data

5.2 Special hazards arising from the substance or mixture - During a fire, irritating and toxic gases may be generated by thermal decomposition or combustion.

5.3 Advice for firefighters - Wear self-contained breathing apparatus and protective clothing to prevent contact with skin/eyes.

5.4 Further information - Remove container from danger zone and cool with water. Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures - Wear protective equipment. Ensure adequate ventilation. Keep unprotected persons away. Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray. Wash spill site after material pickup is complete.

6.2 Environmental precautions - Prevent further leakage or spillage if safe to do so. Do not let this chemical enter the environment.

6.3 Methods and materials for containment and cleaning up - Spilled product should be covered with suitable (non-flammable) absorbing material. Dispose of contaminated material as waste according to section 13. Ensure adequate ventilation

6.4 Reference to other sections - See Section 7 for information on safe handling. See section 8 for information on personal protection equipment. See Section 13 for information on disposal.

SECTION 7 - HANDLING AND STORAGE

7.1 Precautions for safe handling - For precautions see section 2.2.

Wash thoroughly after handling. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation. Ensure adequate ventilation. Remove contaminated clothing and protective equipment before entering eating areas.

7.2 Conditions for safe storage, including any incompatibilities - Store in a dry, cool and well-ventilated place. Keep container closed when not in use. See Section 10 for stability and reactivity information. Keep container tightly closed in a dry and well-ventilated area.

Containers which are opened must be carefully resealed and kept upright to prevent leakage. Keep in dark place, Inert atmosphere, Room temperature

7.3 Specific end use(s) - No further relevant information available

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION**8.1 Control parameters****8.2 Exposure controls**

Engineering Controls: Use process enclosure, local exhaust ventilation, or other engineering controls to control airborne levels. Safety shower and eye bath.

Personal Protective Equipment

Eye and face protection: Wear chemical safety glasses.

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

Respiratory protection: Wear appropriate protective mask with a filter against organic vapors.

Thermal hazard: No data available

Environmental exposure controls: Do not let product enter drains.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**9.1 Information on basic physical and chemical properties**

| | | | |
|---|-------------------|---|-------------------|
| Physical state: | Liquid | Decomposition temperature: | No data available |
| Color: | Clear colourless | pH: | No data available |
| Odor: | No data available | Kinematic viscosity: | No data available |
| Freezing/Melting Point: | No data available | Solubility: | No data available |
| Boiling Point: | 67-69 | Partition coefficient n-octanol/water (log value): | No data available |
| Flammability: | No data available | Vapor pressure: | No data available |
| Lower and upper explosion limit: | No data available | Density and/or relative density: | No data available |
| Flash Point: | No data available | Relative vapor density: | No data available |
| Auto-ignition temperature: | No data available | Particle characteristics: | No data available |

9.2 Other safety information - No data available

SECTION 10 - STABILITY AND REACTIVITY

10.1 Reactivity - No data available

10.2 Chemical stability - The product is chemically stable under standard ambient conditions (room temperature)

10.3 Possibility of hazardous reactions - No data available

10.4 Conditions to avoid - Heat, flames and sparks. Extremes of temperature and direct sunlight.

10.5 Incompatible materials - Strong oxidizing agents

10.6 Hazardous decomposition products - Carbon monoxide , carbon dioxide , nitrogen oxides

SECTION 11 - TOXICOLOGICAL INFORMATION**11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**

Acute toxicity - No data available

Skin irritation or corrosion - Causes skin irritation

Serious eye damage / irritation - Causes serious eye irritation.

Respiratory or skin sensitization - No data available

Germ cell mutagenicity - No data available

Carcinogenicity - No data available

Reproductive toxicity - No data available

Specific target organ system toxicity (STOT) - repeated exposure: No data available

Specific target organ system toxicity (STOT) - single exposure: No data available

11.2 Additional Information - To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated. Other dangerous properties cannot be excluded. This substance should be handled with particular care.

SECTION 12 - ECOLOGICAL INFORMATION

12.1 Toxicity - No data available

12.2 Persistence and degradability - No data available

12.3 Bioaccumulative potential - No data available

12.4 Mobility in soil - No data available

12.5 Results of PBT and vPvB assessment - This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Endocrine disrupting properties - No data available

12.7 Other adverse effects - No data available

12.8 Additional information - No data available

SECTION 13 - DISPOSAL CONSIDERATIONS**13.1 Waste treatment methods**

Hand over to disposers of hazardous waste. Must be specially treated under adherence to official regulations. Consult state, local or national regulations for proper disposal. The product must not be disposed of with municipal waste.

Contaminated packaging

Dispose of as unused product.

SECTION 14 - TRANSPORT INFORMATION

| | | | |
|---|--|---------------------------|-------------|
| 14.1 UN number: | ADR/RID: 2733 | IMDG: 2733 | IATA: 2733 |
| 14.2 UN proper shipping name: | ADR/RID: AMINES, FLAMMABLE, CORROSIVE, N.O.S. (N-Methyl-tert-butylamine) | | |
| | IMDG: AMINES, FLAMMABLE, CORROSIVE, N.O.S. (N-Methyl-tert-butylamine) | | |
| | IATA: AMINES, FLAMMABLE, CORROSIVE, N.O.S. (N-Methyl-tert-butylamine) | | |
| 14.3 Transport hazard class(es) | ADR/RID: 3 (8) | IMDG: 3 (8) | IATA: 3 (8) |
| 14.4 Packing group | ADR/RID: II | IMDG: II | IATA: II |
| 14.5 Environmental hazards | ADR/RID: no | IMDG Marine pollutant: no | IATA: no |
| 14.6 Special precautions for user: | No data available | | |
| 14.7 Maritime transport in bulk according to IMO instruments - | No data available | | |

SECTION 15 - REGULATORY INFORMATION**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 as amended. Environmental Protection Act 1990 as amended. Clean Air Act 1993 as amended. Regulation (EC) No. 1907/2006 of the European Parliament and of the Council of 18th December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing the European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No. 793/93 and Commission Regulation (EC) No. 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, as amended. Regulation (EC) No. 1272/2008 of the European Parliament and of the Council of 16th December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No. 1907/2006, as amended.

15.2 Chemical safety assessment - No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16 - OTHER INFORMATION**Key to abbreviations and acronyms used in the safety data sheet**

| | |
|---|---|
| ATE - Acute Toxicity Estimate | Kow - octanol-water partition coefficient |
| ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road | LC50 - Lethal Concentration to 50 % of a test population |
| ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways | LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose) |
| CEN - European Committee for Standardisation | LE - Legal Entity |
| C&L - Classification and Labelling | LoW - List of Wastes |
| CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008 | (http://ec.europa.eu/environment/waste/framework/list.htm) |
| CAS# - Chemical Abstracts Service number | LR - Lead Registrant |
| CMR - Carcinogen, Mutagen, or Reproductive Toxicant | M/I - Manufacturer / Importer |
| CSA - Chemical Safety Assessment | MS - Member States |
| CSR - Chemical Safety Report | MSDS - Material Safety Data Sheet |
| DNEL - Derived No Effect Level | OC - Operational Conditions |
| DPD - Dangerous Preparations Directive 1999/45/EC | OECD - Organization for Economic Co-operation and Development |
| DSD - Dangerous Substances Directive 67/548/EEC | OEL - Occupational Exposure Limit |
| DU - Downstream User | OJ - Official Journal |
| EC - European Community | OR - Only Representative |
| ECHA - European Chemicals Agency | OSHA - European Agency for Safety and Health at work |
| EC-Number - EINECS and ELINCS Number (see also EINECS and ELINCS) | PBT - Persistent, Bioaccumulative and Toxic substance |
| EEA - European Economic Area (EU + Iceland, Liechtenstein and Norway) | PEC - Predicted Effect Concentration |
| EEC - European Economic Community | PNEC(s) - Predicted No Effect Concentration(s) |
| EINECS - European Inventory of Existing Commercial Substances | PPE - Personal Protection Equipment |
| ELINCS - European List of notified Chemical Substances | (Q)SAR - Qualitative Structure Activity Relationship |
| EN - European Standard | REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006 |
| EQS - Environmental Quality Standard | RID - Regulations concerning the International Carriage of Dangerous Goods by Rail |
| EU - European Union | RIP - REACH Implementation Project |
| Euphrac - European Phrase Catalogue | RMM - Risk Management Measure |
| EWG - European Waste Catalogue (replaced by LoW – see below) | SCBA - Self-Contained Breathing Apparatus |
| GES - Generic Exposure Scenario | SDS - Safety data sheet |
| GHS - Globally Harmonized System | SIEF - Substance Information Exchange Forum |
| IATA - International Air Transport Association | SME - Small and Medium sized Enterprises |
| ICAO-TI - Technical Instructions for the Safe Transport of Dangerous Goods by Air | STOT - Specific Target Organ Toxicity |
| IMDG - International Maritime Dangerous Goods | (STOT) RE - Repeated Exposure |
| IMSBC - International Maritime Solid Bulk Cargoes | (STOT) SE - Single Exposure |
| IT - Information Technology | SVHC - Substances of Very High Concern |
| IUCLID - International Uniform Chemical Information Database | UFI - Unique Formula Identifier |
| IUPAC - International Union for Pure Applied Chemistry | UN - United Nations |
| JRC - Joint Research Centre | vPvB - Very Persistent and Very Bioaccumulative |

The information contained in the SDS are compiled according to the present knowledge of the manufacturer. It does not represent any guarantee of the properties of the product. SDS shall be used only as a guide. Georganics Ltd. is not liable for damages incurred in the handling or contact with chemicals.

