

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : MONOETHYLENE GLYCOL INDUSTRIAL

Recommended use of the chemical and restrictions on use

Recommended use : industrial chemical

Manufacturer or supplier's details

Company : Univar Solutions Brasil LtdaUnivar Solutions Brasil Ltda

Address : Rua Arinos, 15
Parque Industrial Anhanguera – CEP: 06276-032
BrazilRua Arinos, 15
Parque Industrial Anhanguera – CEP: 06276-032
Brazil

Emergency telephone number : (19) 3874-7000 e Ambipar 0800 117 2020

Additional Information: : Phone: (19) 3874-7000
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SECTION 2. HAZARDS IDENTIFICATION
Classification according to GHS BR (ABNT NBR 14725-2)

Acute toxicity (Oral) : Category 4

Skin irritation : Category 2

Specific target organ toxicity - single exposure : Category 1

Specific target organ toxicity - repeated exposure : Category 2 (Kidney)

GHS label elements in accordance with ABNT NBR 14725 Standard

Hazard pictograms :



Signal word : Danger

Hazard statements : H302 Harmful if swallowed.
H315 Causes skin irritation.
H370 Causes damage to organs.
H373 May cause damage to organs (Kidney) through prolonged or repeated exposure.

Precautionary statements : **Prevention:**
P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
P264 Wash skin thoroughly after handling.

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

P280 Wear protective gloves.

Response:

P308 + P311 IF exposed or concerned: Call a POISON CENTER/ doctor.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards which do not result in classification

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components

CAS-No.	Chemical name	Classification	Concentration (% w/w)
107-21-1	Ethylene glycol	Acute toxicity (Oral), Category 4 Specific target organ toxicity - repeated exposure (Kidney), Category 2	$\geq 90 - \leq 100$
111-46-6	Diethylene glycol	Acute toxicity (Oral), Category 4 Specific target organ toxicity - repeated exposure (Kidney), Category 2	$\geq 5 - < 10$

Any concentration shown as a range is due to batch variation.

SECTION 4. FIRST AID MEASURES

- General advice : Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.
Do not leave the victim unattended.
- If inhaled : If unconscious, place in recovery position and seek medical advice.
If symptoms persist, call a physician.
- In case of skin contact : If skin irritation persists, call a physician.
If on skin, rinse well with water.
If on clothes, remove clothes.
- In case of eye contact : Flush eyes with water as a precaution.
Remove contact lenses.

If swallowed	Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.
	: Clean mouth with water and drink afterwards plenty of water. Induce vomiting immediately and call a physician. Keep respiratory tract clear. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Take victim immediately to hospital.
Most important symptoms and effects, both acute and delayed	: None known.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media	: Water spray Alcohol-resistant foam Carbon dioxide (CO2) Dry powder
Unsuitable extinguishing media	: High volume water jet
Hazardous combustion products	: Carbon oxides Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke). toxic fumes
Specific extinguishing methods	: Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Special protective equipment for firefighters	: Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures	: Use personal protective equipment.
Environmental precautions	: Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.
Methods and materials for containment and cleaning up	: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

- Advice on protection against fire and explosion : Normal measures for preventive fire protection.
- Advice on safe handling : Do not breathe vapours/dust.
Avoid exposure - obtain special instructions before use.
Avoid contact with skin and eyes.
For personal protection see section 8.
Smoking, eating and drinking should be prohibited in the application area.
Dispose of rinse water in accordance with local and national regulations.
- Hygiene measures : When using do not eat or drink.
When using do not smoke.
Wash hands before breaks and at the end of workday.
- Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.
Observe label precautions.
Electrical installations / working materials must comply with the technological safety standards.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

CAS-No.	Components	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
107-21-1	Ethylene glycol	TWA (Vapour)	25 ppm	ACGIH
		STEL (Vapour)	50 ppm	ACGIH
		STEL (Inhalable fraction, Aerosol only)	10 mg/m3	ACGIH

Personal protective equipment

- Respiratory protection : Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.
- Filter type : Organic vapour type
In the case of vapour formation use a respirator with an approved filter.
- Hand protection
- Remarks : The suitability for a specific workplace should be discussed with the producers of the protective gloves.
- Eye protection : Eye wash bottle with pure water
Tightly fitting safety goggles
- Skin and body protection : Impervious clothing
Choose body protection according to the amount and concentration of the dangerous substance at the work place.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: liquid
Colour	: transparent
Odour	: sweet
Odour Threshold	: No data available
pH	: No data available
Freezing Point (°C)	: -13 °C (9 °F)
Boiling Point (°C)	: 197.4 °C (387.3 °F) (1,013 hPa)
Flash point	: 111 °C (232 °F) (1,013.25 hPa)
Evaporation rate	: No data available
Flammability (solid, gas)	: No data available
Upper explosion limit	: 15.3 %(V)
Lower explosion limit	: 3.2 %(V)
Vapour pressure	: 0.1 hPa @ 25 °C (77 °F)
Relative vapour density	: 2.14
Relative density	: No data available
Density	: 1.11 g/cm ³ @ 20 °C (68 °F)
Solubility(ies)	
Water solubility	: completely miscible
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: log Pow: -1.36
Auto-ignition temperature	: 398 °C 1,013.25 hPa
Thermal decomposition	: No data available
Viscosity	
Viscosity, kinematic	: 145 mm ² /s @ 25 °C (77 °F)

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: No dangerous reaction known under conditions of normal use.
Chemical stability	: Stable under normal conditions.
Possibility of hazardous reactions	: No hazards to be specially mentioned.
Conditions to avoid	: Keep away from heat, flame, sparks and other ignition

Incompatible materials : sources.
: No data available

SECTION 11. TOXICOLOGICAL INFORMATION**Acute toxicity****Product:**

Acute oral toxicity : Acute toxicity estimate: 489.08 mg/kg

Components:**107-21-1:**

Acute oral toxicity : Assessment: The component/mixture is moderately toxic after single ingestion.

111-46-6:

Acute oral toxicity : LD50 (Human): Calculated 1,120 mg/kg
Assessment: The component/mixture is moderately toxic after single ingestion.

Skin corrosion/irritation**Product:**

Result: Irritating to skin.

Remarks: May cause skin irritation in susceptible persons.

Serious eye damage/eye irritation**Product:**

Remarks: Vapours may cause irritation to the eyes, respiratory system and the skin.

STOT - single exposure**Product:**

Assessment: The substance or mixture is classified as specific target organ toxicant, single exposure, category 1.

STOT - repeated exposure**Components:****107-21-1:**

Target Organs: Kidney

Assessment: The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2.

Further information**Product:**

Remarks: No data available

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity**

No data available

Persistence and degradability**Components:****107-21-1:**

Biodegradability : aerobic
Inoculum: Activated sludge, domestic, adaption not specified
Biodegradation: 90 - 100 %
Exposure time: 10 d
Remarks: Readily biodegradable

111-46-6:

Biodegradability : aerobic
Inoculum: Activated sludge, domestic, adaption not specified
Biodegradation: 90 - 100 %
Exposure time: 28 d
Remarks: Readily biodegradable

Bioaccumulative potential**Components:****107-21-1:**

Bioaccumulation : Species: Fish
Bioconcentration factor (BCF): 0.60
Exposure time: 61 d

111-46-6:

Bioaccumulation : Bioconcentration factor (BCF): 100
Remarks: The substance has low potential for bioaccumulation.

Mobility in soil

No data available

Other adverse effects**Product:**

Additional ecological information : No data available

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**

- Waste from residues : Dispose of in accordance with all applicable local, state and federal regulations.
- Contaminated packaging : Comply with the applicable regulations for the disposal of solid waste. Disposal should be carried out in accordance with official legislation.

SECTION 14. TRANSPORT INFORMATION**International Regulations****IATA-DGR**

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

National Regulations**ANTT**

Not regulated as a dangerous good

Special precautions for user

Not applicable

SECTION 15. INFORMATION ABOUT REGULATIONS

- Specific regulations for the chemical product: : Brazilian local regulations: ABNT NBR 14725 Standard
Federal Decree No. 2,657, of July 3, 1998 – Promulgates ILO Convention No. 170, on Safety in the Use of Chemicals at Work, signed in Geneva, on June 25, 1990.
Ordinance No. 229, of May 24, 2011 - Amends Regulatory Standard No. 26
Resolution No. 5232, of December 14, 2016 - Approves the Supplementary Instructions to the Land Regulations for the Transport of Dangerous Goods, and makes other provisions.

SECTION 16. OTHER INFORMATION**Further information**

Revision Date : 12/21/2022

Material number:

16200343, 16200101, 16200004, 16200003, 16200002, 16184844, 16186595, 16184843, 16123668

Other information : This MSDS was prepared based on current knowledge on the proper handling of the product and under normal conditions of use, according to the application specified on the packaging. Any other form of use of the product that involves its combination with other materials, in addition to forms of use other than those indicated, are the responsibility of the user. It is cautioned that the handling of any quantum substance requires prior knowledge of its dangers by the user. In the workplace, it is up to the company that uses the product to promote the training of its employees regarding the possible risks arising from exposure to the chemical product.

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Full text of other abbreviations

AIIIC - Australian Inventory of Industrial Chemicals; ANTT - National Agency for Transport by Land of Brazil; ASTM - American Society for the Testing of Materials; bw - Body weight; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; Nch - Chilean Norm; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NOM - Official Mexican Norm; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TDG - Transportation of Dangerous Goods; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations

Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative;
WHMIS - Workplace Hazardous Materials Information System

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