

MATERIAL SAFETY DATA SHEET

SECTION 1: IDENTIFICATION OF THE MIXTURE AND OF THE COMPANY

1.1. Product identifier:

Trade name: GLIDEX EXTRA II

1.2. Relevant identified uses of the mixture and uses advised against:

1.2.1. Relevant identified uses

Fluid for cooling systems in engines of all types o

1.2.2. Uses advised against

No data 1.3. Details of the supplier of the safety data sheet:

Przedsiębiorstwo Produkcyjno-Handlowe "Chemia - Bomar" Edward Marciniak

Adress: 49 - 345 Skorogoszcz, ul. Polna 6. Poland

Tel./Fax.: +48 77 4121-033, 4111-033, 4121022

www.plyny.pl

Person responsible for MSDS: Stanislaw Marciniak; biuro@plyny.pl

1.4. Emergency telephone number:

+48 12 411 99 99 - Centre of Toxicological Information Collegium Medicum UJ Cracow

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the mixture:

Under the Regulation (WE) no 1272/2008

Acute Toxicity (oral), Hazard Category 4; with assigned phrase stating the type of hazard H302 Harmful if swallowed

According to the Directive 67/548/EEC (as amended)

Xn - Harmful with assigned phrase R:

R 22 - Harmful if swallowed

Health hazards: harmful if swallowed

Environment hazards: no data

Physical/Chemical hazards: no data

Fire hazards: product contains flammable ingredients. Product vapours form explosive mixtures with air.

2.2. Label elements

Under the Regulation (WE) no 1272/2008

Pictogram:



Signal Word

Hazard statements:

H302 Harmful if swallowed

Precautionary Statement: General:

P101 If medical advice is needed, have product container or label at hand

P102 Keep out of reach of children

P264 Wash face and hands thoroughly after handling

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

P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

P330 Rinse mouth

Storage

P501 Dispose of contents/container in accordance with local/regional/national/international regulation

Hazardous Ingredient: Ethylene glycol

According to the Directive 67/548/EEC (as amended)



Hazard statements R:

R 22 - Harmful if swallowed

Safety phrases S:

S 2 - Keep out of the reach of children

S 46 - If swallowed, seek medical advice immediately and show this container or label

Hazardous Ingredient: Ethylene glycol

2.3. Other hazards:

The mixture doesn't meet the criteria for PBT or vPvB in accordance with Annex XIII of REACH Regulation.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

The product is a mixture, contains water, ethylene glycol, glycerine, additives

The classification of dangerous substances contained in the product is given in Table 3.1 and 3.2 of Annex VI 22

to the Regulation of the Europ	ne Regulation of the European Parliament and Council Regulation (EC) No 1272/2008 (Regulation GHS),						
including Commission Regulation (EC) 790/2009 (1 ATP), the manufacturer and available literature data.No CAS	No WE	Index number	REACH number	Chemical name	Quantity	Hazard category	H, R phrase s
107-21-1	203- 473- 3	603- 027-00- 1	no data	ethylene glycol*	30 % w/w	Acute Tox. (oral) 4** Xn***	H302 R22
* 6 1 6							

- Substance for which there are Community workplace exposure limits
- ** Classification according to Regulation (WE) 1272/2008
- *** Classification according to the Directive 67/548/EEC (as amended)

For the wording of the listed risk phrases and hazard category refer to section 16.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General recommendations

In case of indisposition immediately call a professional health service. Show the risk symbols and H or R phrases from the safety data sheet to a doctor. Inform the doctor on provided first aid. Do not evoke vomiting in any case. If the affected person vomits, turn him/her on side (position of the head

on its side) in order to prevent suffocating with vomits. Contamination of the skin: Remove contaminated clothing. Contaminated areas of the skin wash

thoroughly water with soap. In case of irritation consult a doctor.

Contamination of the eye: Flush contaminated eyes with wide-open eyelids a continuous stream of water for about 15 minutes. In the case of persistent irritation consult an ophthalmologist.

Inhalation: If exposure, move victim to fresh air. Keep warm and quiet. Consult with doctor. Conscious person placed in a rest half seated, ensure calm and warm, unconscious person lay in the recovery position. Ingestion: Immediately seek and provide medical advice. Have the safety data sheet at disposal. Do not

Most important symptoms and effects, both acute and delayed:

Acute symptoms - when swallowed early symptoms mimic alcohol inebriation and are followed by nausea, vomiting, abdominal pain, weakness, muscle tenderness, respiratory failure, convulsions, cardiovascular collapse, pulmonary edema, hypocalcemic tetany, and severe metabolic acidosis. Exposure to and/or consumption of alcohol may increase toxic effects.

Contact with product can cause mild irritation of the skin, eyes, respiratory tract, with higher concentrations may have impaired balance and coordination

Delayed symptoms - disorders of the central nervous system, liver damage

Effects of exposure - no data

Indication of any immediate medical attention and special treatment needed: Note to Physician: No specific antidote, treat symptomatically.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media:

Suitable extinguishing agents: CO2, powders and foam alcohol resistant, water spray, sand Extinguishing media which must not be used for safety reasons; a strong jet of water - the risk of fire spreading

5.2. Special hazards arising from the mixture:

The combustion of the product may produce carbon oxides, harmful gases. Avoid inhalation of combustion products, may pose a threat to health

Advice for fire-fighters; strictly apply the breathing apparatus and protective clothing for fire fighting or during clean-up work immediately after a fire in an enclosed or poorly ventilated areas.

General: inform about the fire, call the appropriate emergency services. Remove from the endangered area unauthorized persons, not involved in extinguishing the fire, order evacuation if necessary

Additional notes: vapours of product form explosive mixtures with air. Tanks and packaging which are not covered by the fire, exposed to fire or high temperature should be cooled by water from a safe distance and if possible removed from the hazardous area.

Fire residues and contaminated waters dispose in according to applicable regulations

Do not introduce contaminated waters into drains.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Use personal protective equipment, especially respiratory protection in case of vapour/fumes/aerosols of product. Avoid direct contact with releasing product. Avoid breathing vapours. Inform about the accident, call the appropriate emergency services (e.g. Fire Brigade, Police). Remove from the hazardous area all persons not taking part in the emergency, order evacuation if necessary.

Remove sources of ignition, announce prohibition of smoking and using sparking tools. Provide adequate

6.2. Environmental precautions

Do not allow to enter drains, groundwater, soil and open water courses. Do not empty into drains.

6.3. Methods and material for containment and cleaning up

In case of container leakage, spillage of the product, protect the source of leak, pour the product into an empty container or place damaged container in an emergency one.

Small amounts of spilled liquid soak up with non-flammable, absorbent material (sand, diatomite, universal binders, etc.) gather in closed container for disposal and utilized. Perform clean-up work with adequate ventilation

6.4. Reference to other sections

Personal protective equipment - section 8 Waste disposal - section 13

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Avoid contact with product, avoid vapour inhalation. Ensure adequate ventilation /exhaust in the workplace. prevent the formation of harmful concentrations of vapours in the air, work in well ventilated areas. Ventilated workplace in such a way that the Occupational Exposure Limit (OEL) is not exceeded. Observe good personal hygiene and wear protective clothing in accordance with information set out in section Special measures for protection against fire and explosion:

Prevent formation of explosive concentrations of vapours in the air, eliminate sources of ignition - don't use open flames, don't smoke.

7.2. Conditions for safe storage, including any incompatibilities

Store only in properly labelled, sealed containers in a well ventilated warehouse.

Protect against heat, contact with potential sources of ignition, direct sunlight. Storage temperature < 50°C. At the warehouse not smoke, eat, use open flame and sparking tools.

Store away from oxidizers, incompatible materials (see section 10). Keep the product away from children, food, beverage and animal feed.

7.3. Specific end use(s)

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters (Poland)

ı	Occupational Exposure Limit	Value (Poland):		STEL, mg/m3
ı	Hazardous Ingredient	No CAS	LTET, mg/m3	STEL, mg/m3
ı	ethylene glycol	107-21-1	15	50

Regulation of the Minister of Labour and Social Policy of 29 November 2002. "On the maximum permissible concentration and intensity of harmful factors in the work environment" (Journal of Laws of 2002. No. 217, item, 1833) with updates

8.2. Exposure controls

Technical exposure controls:

Use engineering controls to reduce air contamination to permissible exposure level. Explosion-proof general and local exhaust ventilation

a) Respiratory protection - is not necessary under normal conditions with sufficient ventilation, required during exposure to high concentrations of vapours. Wear mask or respirator completed with the filter type A (brown colour), counter to organic vapours

b) Hand protection - required protective gloves in case of prolonged or frequently repeated exposure to the product. Material of gloves must be resistant to the product. As the product is a mixture of several substances, the resistance of material of gloves can not be calculated in advance and therefore has to be checked before use. From the manufacturer's advice should be obtained information about the time of the penetration of substances and such time must be respected

c) Eve protection - recommended protective glasses

d) Skin protection - recommended protective clothing

When the concentration of hazardous substance is fixed and known, the selection of personal protective equipment should be made taking into account the concentration of the substance present in a given workplace, exposure time, the activities performed by the employee and the recommendations given by the manufacturer of personal protective equipment. In an emergency situation or where the concentration in the workplace is not known, use personal protection isolating body (tight suit completed with isolating respiratory protective equipment.) Applied personal protective equipment must meet the requirements contained in the Directive 89/686/WE (with later changes)

Procedures monitoring concentrations of hazardous compounds in the air and air quality in the workplace - if they are available and appropriate for given workplace - in accordance with the relevant local or European Standards, taking into account the conditions prevailing in the place of exposure and appropriate measurement methodology adapted to the conditions of work.

- ensure good ventilation (overall and local exhausted ventilation),
- ensure place for eyes and skin rinsing,
- wash hands with soap and water before eating, smoking and after work,
- use general caution while working with chemical substances.

Environmental exposure controls:

Air:				
Hazardous Ingredients	No CAS	The reference val	The reference values averaged over the	
		period, [μg/m3]	period, [µg/m3]	
ethylene glycol	107-21-1	one hour	calendar year	
		100	10	

Regulation of the Minister of Environment of 26 January 2010. "On the reference values for certain substances in the air" (Journal of Laws of 2010., No. 16, Pos. 87)

Do not allow to enter large amounts of product into ground water, sewage, waste water or soil.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Form: Colour acc to specification Odour: no data Odour threshold: 65 mg/m3 reg. to ethylene glycol

no data Melting temperature: no data **Boiling temperature:** Ignition temperature: Self-ignition temperature:

Flammability: product contains flammable ingredients

Explosive properties: vapours of product form explosive mixtures with air Explosive limits in air: LEL: 3,2 % vol.; UEL: 15,3 % vol. reg. to ethylene glycol Oxidising properties: no data Vapour pressure: no data Density: no data Solubility in water: soluble

no data Vapour density: 9.2. Other information: no data

SECTION 10: STABILITY AND REACTIVITY

Partition coefficient n-octanol/water:

Solubility in other solvents:

10.1. Reactivity

No data 10.2. Chemical stability

Product is a chemically stable; it does not decompose under normal conditions (pressure and temperature)

no data

no data