SAFETY DATA SHEET

Hydromx-PG

Commission Regulation (EU) 2020/878 of 18 June 2020.
According to Regulation (EC) No 1907/2006, Annex II, as amended.

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product name Hydromx-PG

Chemical name Solution

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

Identified uses A solution composed of various organic fluids in different proportion and used as 50% Hydromx 50% water in closed circuit cooling and heating systems as a heat transfer fluid.

Uses advised against No specific uses advised against are identified.

1.3. Details of the supplier of the safety data sheet

Supplier Hydromx INC.
58-75 57th Road Maspeth
11378 NY, USA.
Tel.:+1.718.381.0351

1.4. Emergency telephone number

Emergency telephone HYDROMX +1.718.381.0351

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (EU 1272/2008)

Physical hazards Not Classified

Health hazards Not Classified

Environmental hazards Not Classified

2.2. Label elements

Hazard statements NC Not Classified

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

1,2-Propylene glycol **60-80%**

CAS number: 57-55-6 EC number: 200-338-0

Classification
Not Classified

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Glycerine	**5-10 %**
CAS number: 56-81-5	EC number: 200-289-5
Classification	
Not Classified	

Oleic acid	**0,1-5 %**
CAS number: 112-80-1	EC number: 204-007-1
Classification	
Not Classified	

The full text for all hazard statements is displayed in Section 16.

Composition comments See section 8 for workplace exposure limits.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information Get medical attention if any discomfort continues. Show this Safety Data Sheet to the medical personnel.

Inhalation Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Maintain an open airway. Loosen tight clothing such as collar, tie or belt.

Ingestion Rinse mouth thoroughly with water. Remove any dentures. Give a few small glasses of water or milk to drink. Stop if the affected person feels sick as vomiting may be dangerous. Do not induce vomiting unless under the direction of medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. Maintain an open airway. Loosen tight clothing such as collar, tie or belt.

Skin contact Remove affected person from source of contamination. Rinse immediately with plenty of water.

Eye contact Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 10 minutes.

Protection of first aiders First aid personnel should wear appropriate protective equipment during any rescue.

4.2. Most important symptoms and effects, both acute and delayed

General information See Section 11 for additional information on health hazards. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.

Inhalation Gas or vapour in high concentrations may irritate the respiratory system.

Ingestion Gastrointestinal symptoms, including upset stomach.

Skin contact Prolonged contact may cause dryness of the skin.

Eye contact May cause temporary eye irritation.

4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor Treat symptomatically.

Specific treatments No special treatment required.

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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.

Unsuitable extinguishing media Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Specific hazards Containers can burst violently or explode when heated, due to excessive pressure build-up.

Hazardous combustion products Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours.

5.3. Advice for firefighters

Protective actions during firefighting Avoid breathing fire gases or vapours. Evacuate area. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. If a leak or spill has not ignited, use water spray to disperse vapours and protect men stopping the leak.

Special protective equipment for firefighters Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Firefighter's clothing will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions No action shall be taken without appropriate training or involving any personal risk. Keep unnecessary and unprotected personnel away from the spillage. Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Wash thoroughly after dealing with a spillage.

6.2. Environmental precautions

Environmental precautions Avoid discharge to the aquatic environment.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Wear protective clothing as described in Section 8 of this safety data sheet. Clear up spills immediately and dispose of waste safely. Reuse or recycle products wherever possible. Absorb spillage to prevent material damage. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. Neutralise with acid. Caution. May generate heat. Following dilution and neutralisation, discharge to the sewer with plenty of water may be permitted. The requirements of the local water authority must be complied with if contaminated water is flushed directly to the sewer. Dispose of contents/container in accordance with national regulations.

6.4. Reference to other sections

Reference to other sections For personal protection, see Section 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Handle all packages and containers carefully to minimise spills. Keep container tightly sealed when not in use. Avoid the formation of mists.

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Advice on general occupational hygiene Wash promptly if skin becomes contaminated. Take off contaminated clothing. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Wash at the end of each work shift and before eating, smoking and using the toilet. Change work clothing daily before leaving workplace.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry and cool place. Store away from the following materials: Acids.

Storage class Acid-reactive storage.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure controls/Personal protection

8.1. Control parameters

Occupational exposure limits

1,2-Propylene glycol

Long-term exposure limit (8-hour TWA): WEL 10 mg/m³ particulate
Long-term exposure limit (8-hour TWA): WEL 150 ppm 474 mg/m³ total vapour and particulates

Glycerine

Long-term exposure limit (8-hour TWA): WEL 10 mg/m³ mist
WEL = Workplace Exposure Limit.

1,2-Propylene glycol (CAS: 57-55-6)

DNEL	Workers - Inhalation; Long term systemic effects: 168 mg/m³ Workers - Inhalation; Long term local effects: 10 mg/m³ General population - Inhalation; Long term systemic effects: 50 mg/m³ General population - Inhalation; Long term local effects: 10 mg/m³
PNEC	Fresh water; 260 mg/l marine water; 26 mg/l STP; 20000 mg/l Sediment (Freshwater); 572 mg/kg Sediment (Marinewater); 57.2 mg/kg Soil; 50 mg/kg

8.2. Exposure controls

Protective equipment



Appropriate engineering controls Provide adequate ventilation. Good general ventilation should be adequate to control worker exposure to airborne contaminants.

Eye/face protection Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Personal protective equipment that provides appropriate eye and face protection should be worn. The following protection should be worn: Chemical splash goggles.

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Hand protection	Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. To protect hands from chemicals, wear gloves that are proven to be impervious to the chemical and resist degradation. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. Frequent changes are recommended.
Other skin and body protection	Appropriate footwear and additional protective clothing complying with an approved standard should be worn if a risk assessment indicates skin contamination is possible.
Hygiene measures	Provide eyewash station and safety shower. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Clean equipment and the work area every day. Good personal hygiene procedures should be implemented. Wash at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or smoke.
Respiratory protection	Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Provide adequate ventilation. Large Spillages: If ventilation is inadequate, suitable respiratory protection must be worn.
Environmental exposure controls	Not regarded as dangerous for the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

		50% mix with water
Appearance	Liquid.	Liquid
Colour	Blue.	Blue
Odour	Slight chemical smell	Slight chemical smell No information available
Odour threshold	No information available.	
pH	pH (concentrated solution): 8,2-8,9 (25˚C/77˚F)	10.0 Literature
Freezing Point	<-50˚C (<-58˚F)	<-33.8 ˚C (<-28.8 ˚F)
Initial boiling point and range	106°C/222°F	106 ˚C (223 ˚F)
Flash point	Not known.	Not Known
Evaporation rate	No information available.	<0.5 *estimated*
Flammability (solid, gas)	No information available.	No information available
Upper/lower flammability or explosive limits	No information available.	2.6-12.5% vol. *Literature*
Vapour pressure	13 kPa @ 60°C/140°F	15.5 kPa @ 20°C/68°F
Vapour density	No information available.	>1.0 *Literature*
Relative density	1.06 ± 0.01 g/ cm³	1.044 kg/m3 @ 20°C/68°F
Density or relative density	1052.3 kg/m3 (25˚C/77˚F)	
Solubility(ies)	Completely soluble in water.	Completely soluble in water
Partition coefficient	No information available.	No information available
Auto-ignition temperature	No information available.	371°C/700°F

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Decomposition Temperature	No information available.	No information available
Viscosity	Dynamic: 12,50 mPa s @ 25°C/77°F	(kinematic) 6.4cSt
Explosive properties	No information available.	No information available
Particle characteristics	No information available.	

9.2. Other information

Other information No information required.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stability Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions No potentially hazardous reactions known.

10.4. Conditions to avoid

Conditions to avoid There are no known conditions that are likely to result in a hazardous situation.

10.5. Incompatible materials

Materials to avoid Acid anhydrides. Acids. Phenols, cresols.

10.6. Hazardous decomposition products

Hazardous decomposition products Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapours.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity - oral

Notes (oral LD_{50}) Based on available data the classification criteria are not met.

Acute toxicity - dermal

Notes (dermal LD_{50}) Based on available data the classification criteria are not met.

Acute toxicity - inhalation

Notes (inhalation LC_{50}) Based on available data the classification criteria are not met.

Skin corrosion/irritation

Skin corrosion/irritation Based on available data the classification criteria are not met.

Serious eye damage/irritation

Serious eye damage/irritation Based on available data the classification criteria are not met.

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Respiratory sensitisation

Respiratory sensitisation	Based on available data the classification criteria are not met.

Skin sensitisation

Skin sensitisation	Based on available data the classification criteria are not met.

Germ cell mutagenicity

Genotoxicity - in vitro	Based on available data the classification criteria are not met.

Carcinogenicity

Carcinogenicity	Based on available data the classification criteria are not met.
IARC carcinogenicity	None of the ingredients are listed or exempt.

Reproductive toxicity

Reproductive toxicity - fertility	Based on available data the classification criteria are not met.
Reproductive toxicity - development	Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

STOT - single exposure	Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure	Not classified as a specific target organ toxicant after repeated exposure.

Aspiration hazard

Aspiration hazard	Based on available data the classification criteria are not met.

General information	No specific health hazards known. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	Prolonged inhalation of high concentrations may damage respiratory system.
Ingestion	Gastrointestinal symptoms, including upset stomach. Fumes from the stomach contents may be inhaled, resulting in the same symptoms as inhalation.
Skin contact	Prolonged contact may cause dryness of the skin.
Eye contact	May cause temporary eye irritation.
Route of exposure	Ingestion Inhalation Skin and/or eye contact
Target organs	No specific target organs known.

11.2. Information on other hazards

Information on other hazards	This product does not contain any known or suspected endocrine disruptors.

Toxicological information on ingredients.

1,2-Propylene glycol

Acute toxicity - oral

Notes (oral LD_{50})	LD_{50} >2000 mg/kg, Oral, Rat

Acute toxicity - dermal

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Notes (dermal LD_{50})	LD_{50} >2000 mg/kg, Dermal, Rabbit

Glycerine

Acute toxicity - oral	
Acute toxicity oral (LD_{50} mg/kg)	12,600.0
Species	Rat
Acute toxicity - dermal	
Notes (dermal LD_{50})	LD_{50} 56750 mg/kg, Dermal, Guinea pig

SECTION 12: Ecological information

Ecotoxicity Not regarded as dangerous for the environment. However, large or frequent spills may have hazardous effects on the environment.

12.1. Toxicity

Toxicity Based on available data the classification criteria are not met.

Ecological information on ingredients.

1,2-Propylene glycol

Acute aquatic toxicity	
Acute toxicity - fish	LC_{50}, 96 hour: 40613 mg/l, Oncorhynchus mykiss (Rainbow trout)
Acute toxicity - aquatic invertebrates	LC_{50}, 48 hour: 18340 mg/l, Ceriodaphnia dubia NOEC, 7 day: 13020 mg/l, Ceriodaphnia dubia
Acute toxicity - aquatic plants	EC_{50}, 96 hour: 19000 mg/l, Pseudokirchnerella subcapitata

Glycerine

Acute aquatic toxicity	
Acute toxicity - fish	LC_{50}, 96 hours: >5000 mg/l, Fish
Acute toxicity - aquatic plants	EC_{50}, 72 hours: >2900 mg/l, Algae
Acute toxicity - microorganisms	EC_{50}, : 10000 mg/l, Pseudomonas putida

12.2. Persistence and degradability

Persistence and degradability The degradability of the product is not known.

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient No information available.

12.4. Mobility in soil

Mobility The product is water-soluble and may spread in water systems.

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12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment	No data available.

12.6. Endocrine disrupting properties

Endocrine disrupting properties	The product does not contain any endocrine disrupting substance.

12.7. Other adverse effects

Other adverse effects	None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information	The generation of waste should be minimised or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way. Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements.
Disposal methods	Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste packaging should be collected for reuse or recycling. Incineration or landfill should only be considered when recycling is not feasible. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of the local water authority.

SECTION 14: Transport information

General	The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

14.1. UN number or ID number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

No transport warning sign required.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

Not applicable.

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According to Regulation (EC) No 1907/2006, Annex II, as amended.

14.7. Maritime transport in bulk according to IMO instruments

Maritime transport in bulk according to IMO instruments	Not applicable.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

National regulations	Commission Regulation (EU) 2020/878 of 18 June 2020. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended). According to Regulation (EC) No 1907/2006, Annex II, as amended.
Authorisations (SI 2020 No. 1577 Annex XIV) and REACH 1907/2006, Annex XIV	No specific authorisations are known for this product.
Restrictions (SI 2020 No. 1577 Annex XVII) and REACH 1907/2006, Annex XVII	No specific restrictions on use are known for this product.
Seveso Directive - Control of major accident hazards	Not relevant.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Abbreviations and acronyms used in the safety data sheet	TWA: Time weighted Average WEL: Workplace Exposure Limit STEL: Short Term Exposure Limits ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road. ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways. CAS: Chemical Abstracts Service. IATA: International Air Transport Association. ICAO: Technical Instructions for the Safe Transport of Dangerous Goods by Air. IMDG: International Maritime Dangerous Goods. PBT: Persistent, Bioaccumulative and Toxic substance. vPvB: Very Persistent and Very Bioaccumulative. LC50: Lethal Concentration to 50 % of a test population. LD50: Lethal Dose to 50% of a test population (Median Lethal Dose). EC_{50}: 50% of maximal Effective Concentration.

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Key literature references and sources for data	This SDS is prepared based on the information received from the product owner.
Training advice	Read and follow manufacturer's recommendations. Only trained personnel should use this material.
Revision comments	SDS has been revised under the current regulations.
Issued by	Büşra TARAKCI / CRAD gbf@crad.com.tr Tel+90 216 3354600
Note to organizer	.
Revision date	13/10/2026
Revision	3.1
Supersedes date	14/06/2016
SDS number	5931

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