



HYDROFREEZE™

Safety Data Sheet

Date of first issue: 21/10/2020

Revision date: 21/04/2021

Supersedes: Version 1.0

Version: 2.0

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

1.1. Product identifier

Trade name : HYDROFREEZE™
Other means of identification : N/A

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

Use of the substance/mixture : **Used as a cooling medium inside an insulated container to assist with the preservation of frozen products during transit. Phase change material with a solid-liquid transition at temperatures around -21°C.**

1.3. Details of the supplier of the safety data sheet

Hydropac Ltd
Unit 2, M40 Industrial Centre,
Blenheim Road
High Wycombe
Buckinghamshire
HP12 3RS
T: 01494 530182
W: www.hydropac.co.uk

1.4. Emergency telephone number

Emergency number : 01494 530182

SECTION 2: Hazards identification*

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

The mixture is not classified as hazardous according to the Regulation (EC) No 1272/2008, transposed as The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2019.

For full text of Hazard- and EU Hazard- statements: see SECTION 16, if relevant.

2.2. Label elements

Not applicable

Hazard pictograms :
Signal word :
Hazard statements :
Precautionary statements :

2.3. Other hazards

Not applicable

SECTION 3: Composition/information on ingredients*

3.1. Substance

Not applicable

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3.2. Mixture

The mixture does not contain any substances that are classified as hazardous according to the Regulation (EC) No 1272/2008, transposed as The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2019, or substances with documented workplace exposure limit.

Name	CAS Number	EC Number	UK/EU REACH registration No.	% w/w	Classification according to Regulation (EC) No 1272/2008 [CLP]

Full text of H-phrases: see section 16, if relevant.

SECTION 4: First aid measures*

4.1. Description of first aid measures

- Eye contact : Rinse thoroughly with clean water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists seek medical advice/attention.
- Ingestion : Rinse mouth thoroughly with clean water (only if the person is conscious). Do NOT induce vomiting. If symptoms persist, seek medical advice/attention.
- Skin contact : Wash contacted area with mild soap and clean water. If irritation develops, seek medical advice/attention.

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

- Eye contact : Prolonged exposure may cause eye irritation.
- Ingestion : May result in severe thirst, raised blood pressure, nausea, vomiting and diarrhea.
- Skin contact : Prolonged exposure may cause skin irritation and may aggravate pre-existing skin conditions (e.g. eczema).

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

Follow general safety guidelines and treat symptomatically.

SECTION 5: Firefighting measures*

5.1. Extinguishing media

- Suitable extinguishing media : Use any appropriate medium to extinguish surrounding fire
- Unsuitable extinguishing media : No information available on incompatibilities with extinguishing media, but ensure that extinguishing media is compatible with the surrounding area. In the presence of electrical voltage, water or foam should not be used as extinguishing media. For safety reasons, water with a full jet should not be used.

5.2. Special hazards arising from the substance or mixture

The product is not classified as flammable

5.3. Advice for firefighters

Wear self-contained breathing apparatus. Use standard firefighting procedures and consider the hazards of other materials involved. Cool endangered containers with water spray and move containers from fire area if you can do so without risk.

SECTION 6: Accidental release measures*

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Refer to the protective measures stated in Sections 7 and 8

6.1.1. For non-emergency personnel

Keep unprotected personnel away.

6.1.2. For emergency responders

No further information available.

6.2. Environmental precautions

Avoid release to environment

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Contain and use absorbent material to mop up the spill. White stains/residue may appear after drying. Clean residue with a suitable household cleaning agent.

6.4. Reference to other sections

Not applicable

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SECTION 7: Handling and storage*

7.1. Precautions for safe handling

- Additional hazards when processed : Wear suitable gloves to protect against cold during handling of HydroFreeze™ upon removal from freezer.
- Precautions for safe handling : HydroFreeze™ will be encapsulated in a plastic film pouch upon arrival to customers. Do NOT puncture the pouch or mishandle the product in a way which may compromise the seal or integrity of the plastic film. Packs are significantly more damage-prone once frozen – do NOT drop the pack. Failure to observe safe handling may result in leakage of product once melted.
- Hygiene measures : Handle in accordance with good industrial hygiene and safety practices. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : None specified.
- Storage conditions : Keep out of reach of children. Store in a cool dry place away from direct sunlight.
- Incompatible materials : Metal receptacles in contact with product are susceptible to oxidation/rust.

7.3. Specific end use(s)

Refer to section 1.2

SECTION 8: Exposure controls/personal protection*

8.1. Control parameters

No further data

8.2. Exposure controls

- Engineering Controls : Liquid at 20°C, solid below -25°C
- Personal Protective Equipment**
- Eye and face protection : Avoid contact with eyes
- Hand protection : Avoid contact with skin
- Respiratory Protection : No further information
- Thermal hazards : None identified
- Hygiene measures : Wash hands after handling
- Environmental protection measures : Prevent release to environment

SECTION 9: Physical and chemical properties*

9.1. Information on basic physical and chemical properties

- Physical state : Liquid at 20°C, solid below -25°C
- Appearance : Gel
- Color : Cloudy white/yellow
- Odor : No data available
- Odor threshold : No data available
- pH : 6 – 8
- Relative evaporation rate (butyl acetate=1) : No data available
- Melting point : No data available
- Freezing point : -21°C
- Boiling point : >100°C
- Flash point : No data available
- Auto-ignition temperature : No data available
- Decomposition temperature : No data available
- Flammability (solid, gas) : Non-flammable
- Vapor pressure : No data available
- Relative vapour density at 20 °C : No data available
- Relative density : 1.143
- Solubility : No data available
- Log Pow : No data available

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Log Kow	:	No data available
Viscosity, kinematic	:	No data available
Viscosity, dynamic	:	No data available
Explosive properties	:	Non-explosive
Oxidising properties	:	Non-oxidising
Explosive limits	:	No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity*

10.1. Reactivity

No known hazardous reactions.

10.2. Chemical stability

Stable under specified conditions of use.

10.3. Possibility of hazardous polymerization

Stable under specified conditions of use.

10.4. Conditions to avoid

Direct sunlight. Excessive heat.

10.5. Incompatible materials

No further information.

10.6. Hazardous decomposition products

None specified.

SECTION 11: Toxicological information*

11.1. Information on toxicological effects

Skin corrosion/irritation	:	May cause mild skin irritation in contact with damaged skin and aggravate pre-existing skin conditions (e.g. eczema)
Serious eye damage/irritation	:	May cause eye irritation
Respiratory or skin sensitisation	:	Product is not known to contain ingredients classified with sensitising effects, or suspected to produce an allergic reaction
Germ cell mutagenicity	:	Product is not known to contain ingredients with mutagenic potential
Carcinogenicity	:	Product is not known to contain suspected carcinogens
Reproductive toxicity	:	Product is not known to contain ingredients with effects on reproduction
Specific target organ toxicity (single exposure)	:	Product is not known to contain ingredients classified as a STOT through single exposure
Specific target organ toxicity (repeated exposure)	:	Product is not known to contain ingredients classified as a STOT through repeated exposure
Aspiration hazard	:	No further information
Symptoms/injuries after inhalation	:	No further information
Symptoms/injuries after eye contact	:	May cause eye irritation

SECTION 12: Ecological information*

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available.

12.4. Mobility in soil

No additional information available

12.5. Other adverse effects

Effect on ozone layer	:	No additional information available
Effect on the global warming	:	No additional information available

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Other information : No additional information available

SECTION 13: Disposal considerations*

13.1. Waste treatment methods

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

Additional information : Empty containers should be taken for recycling, recovery or waste in accordance with local regulation.

SECTION 14: Transport information*

ADR/RID/IMDG Code/IATA/ADN

14.1 UN-Number:	Not subject to transport regulation
14.2 UN Proper Shipping Name:	Not subject to transport regulation
14.3 Transport hazard class(es):	Not subject to transport regulation
14.4 Packing group:	Not subject to transport regulation
14.5 Environmental hazards:	Not subject to transport regulation
14.6 Special precautions:	Not subject to transport regulation
14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:	Not subject to transport regulation

SECTION 15: Regulatory information*

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

This product is classified and labelled according to Regulation (EC) No. 1272/2008 on classification, labelling and packaging, transposed as the Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use) (Amendment etc.) (EU Exit) Regulations 2019.

Other EU Regulations

Regulation (EC) 1907/2006

The Control of Substances Hazardous to Health Regulations 2002

EH40/2005 Workplace exposure limits

REACH registration dossier

Authorisations and/or restrictions on use: Not Applicable

15.2. Chemical safety assessment

No further information

SECTION 16: Other information*

Indication of changes : An ** indicates a revision from a previous versions

Revision date : 21/04/2021

Other information : No further information

Abbreviations and acronyms

ADN	Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	Agreement concerning the International Carriage of Dangerous Goods by Road.
CAS number	Chemical Abstracts Service Number
CLP	Classification, Labelling and Packaging
EC number	European Inventory of Existing Commercial Chemical Substances
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
PBT	Persistent, bioaccumulative and toxic
vPvT	Very persistent, very toxic
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
STOT	Specific target organ toxicity
STOT SE	Specific target organ toxicity, single exposure
STOT RE	Specific target organ toxicity, repeated exposure
STOT	Short term exposure limit

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vPvB very persistent and very bioaccumulative
UN United Nations

Text of hazard statements and hazard classification codes referred to in this SDS: Not relevant

The information in the sheet was written based on the best knowledge and experience currently available. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.