

SAFETY DATA SHEET

HD 6900
DOWFROST 50-50

Preparation Date: 28/Sep/2020

Version: 2

1. IDENTIFICATION

Product identifier

Product Name DOWFROST 50-50

Other means of identification

SDS Number HD6900-50%

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended Use Intended as a heat transfer fluid for closed-loop systems.

Restricted Uses No information available

Initial Supplier Identifier

Hood Chemical.
295 Alliance Rd. #14
Milton, On. L9T 4W8
Telephone: 1-800-657-9791

Emergency telephone number

24 Hour Emergency Phone Number (CANUTEC): 1-888-226-8832 (1-888-CAN-UTEC)

2. HAZARD IDENTIFICATION

Hazardous Classification of the substance or mixture

None

Label elements

Hazard pictograms None

Hazard statements

The mixture does not meet the criteria for classification.

Prevention

Use only outdoors or in a well-ventilated area
Wash hands thoroughly after handling

Response

Get medical advice/attention if you feel unwell
If eye irritation persists: Get medical advice/attention
IF ON SKIN: Wash with plenty of soap and water

Storage

Store locked up

Disposal

Disposal of all wastes must be done in accordance with municipal, provincial and federal regulations

Unknown acute toxicity No information available

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance

Not applicable.

Mixture

Chemical Name	CAS No	Weight-% (W/W)	Synonyms
Water	7732-18-5	30 - 60%	Water
Propylene glycol	57-55-6	30 - 60%	Propylene glycol
Dipotassium phosphate	7758-11-4	1 - 5%	Dipotassium phosphate

Notes:

Contains: Aqueous additives, Not Hazardous < 2.0 %. Mixture of high purity Dow PuraGuard™ US Pharmacopeia grade propylene glycol, phosphate based corrosion inhibitor and pH stabilizer, and confidential performance additives.

4. FIRST-AID MEASURES

Description of first aid measures**Inhalation**

Remove to fresh air.

Eye contact

Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

Skin contact

Wash skin with soap and water.

Ingestion

Clean mouth with water and drink afterwards plenty of water.

Most important symptoms and effects, both acute and delayed:

No adverse health effects are expected from swallowing. May cause slight transient (temporary) eye irritation. No significant irritation expected from a single short-term exposure. Repeated contact may cause flaking and softening of skin.

Indication of any immediate medical attention and special treatment needed:**Note to physicians**

Treatment based on sound judgment of physician and individual reactions of patient.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

To extinguish combustible residues of this product use water fog, carbon dioxide, dry chemical or foam.

Specific hazards arising from the substance or mixture

This material will not burn until the water has evaporated. Residue can burn.

Hazardous combustion products

The smoke may contain unidentified toxic and/or irritating compounds. Decomposition products can include and are not limited to: Carbon monoxide. Carbon dioxide.

Special protective equipment and precautions for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Use personal protective equipment as required.

Environmental precautions

Prevent from entering into soil, ditches, sewers, waterways and/or groundwater. Consult local authorities.

Methods and materials for containment and cleaning up

Small spills: soak up with absorbent material and scoop into containers. Large spills : prevent contamination of waterways. Dike and pump into suitable containers. Clean up residual with absorbent material, place in appropriate container and flush with water.

7. HANDLING AND STORAGE

Precautions for safe handling

Handle in accordance with good industrial hygiene and safety practice. Spills of these organic materials on hot fibrous insulations may lead to lowering of the autoignition temperature possibly resulting in spontaneous combustion.

Conditions for safe storage, including any incompatibilities

Do not store in: galvanized steel. Do not store in unlabeled containers. Store in carbon steel, stainless steel. Store in original container. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits

Chemical Name	Alberta OEL	British Columbia OEL	Ontario	Quebec OEL	Exposure Limit - ACGIH	Immediately Dangerous to Life or Health - IDLH
Water 7732-18-5	Not available	Not available	Not available	Not available	Not available	Not available
Propylene glycol 57-55-6	Not available	Not available	TWA: 10 mg/m ³ TWA: 50 ppm TWA: 155 mg/m ³	Not available	Not available	Not available
Dipotassium phosphate 7758-11-4	Not available	Not available	Not available	Not available	Not available	Not available

Consult local authorities for recommended exposure limits

Appropriate engineering controls

Engineering controls

Use in a well ventilated area.

Individual protection measures, such as personal protective equipment

Eye/face protection

Chemical goggles; also wear a face shield if splashing hazard exists.

Hand protection

Use gloves chemically resistant to this material, examples of preferred glove barrier materials include: Butyl rubber. Natural rubber gloves. Neoprene gloves. Nitrile rubber. Polyethylene gloves. Ethyl Vinyl Alcohol Laminate (EVAL). Polyvinyl alcohol (PVA). Polyvinylchloride (PVC) gloves. NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials as well as the instructions/specifications provided by the glove supplier.

Skin and body protection

Skin contact should be prevented through the use of suitable protective clothing, gloves and footwear, selected for conditions of use and exposure potential. Consideration must be given both to durability as well as permeation resistance.

Respiratory protection

If exposure exceeds occupational exposure limits, use an appropriate NIOSH-approved respirator. Organic vapor cartridge with a particulate pre-filter.

General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance

Physical state	Liquid
Color	Clear
Odor	Odorless
Odor threshold	No information available

<u>PROPERTIES</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	9.5	None known
Melting point / freezing point	-33.8 °C / -28.8 °F	None known
Initial boiling point/boiling range	104 °C / 219 °F	None known
Flash point	Not available.	Not available
Evaporation rate	<0.5	None known
Flammability (solid, gas)	No data available	None known
Flammability Limit in Air		
Upper flammability limit:	12.5	
Lower flammability limit:	2.6	
Vapor pressure	No data available	None known
Relative vapor density	>1.0	None known
Specific Gravity	1.06	
Water solubility	Soluble in water	
Solubility in other solvents	No data available	
Partition coefficient	No data available	
Autoignition temperature	371 °C / 700 °F	None known
Decomposition temperature	No data available	None known
Kinematic viscosity	6.3 cSt	None known
Dynamic viscosity	No data available	None known
Explosive properties	No information available.	
Oxidizing properties	No information available.	
Molecular weight	No information available	
VOC Percentage Volatility	No information available	
Liquid Density	No information available	
Bulk density	No information available	

10. STABILITY AND REACTIVITY

Reactivity/Chemical Stability

Stable under normal conditions

Possibility of hazardous reactions

No additional remark.

Hazardous polymerization

Will not occur.

Conditions to avoid

High temperatures. Some components of this product can decompose at elevated temperatures. Generation of gas during decomposition can cause pressure in closed systems.

Incompatible materials

Contact with oxidizing agents. Strong acids. Strong bases.

Hazardous decomposition products

Carbon monoxide. Carbon dioxide.

11. TOXICOLOGICAL INFORMATION**Information on likely routes of exposure****Inhalation**

No significant irritation expected from a single short-term exposure.

Eye contact

May cause slight transient (temporary) eye irritation.

Skin contact

No significant irritation expected from a single short-term exposure. Repeated contact may cause flaking and softening of skin.

Ingestion

No adverse health effects are expected from swallowing.

Information on toxicological effects**Symptoms**

No additional information available.

Numerical measures of toxicity**Acute toxicity**

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral) 42,553.00 mg/kg

ATEmix (dermal) 44,255.00 mg/kg

Unknown acute toxicity No information available

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Water 7732-18-5	> 90 mL/kg (Rat)	Not available	Not available
Propylene glycol 57-55-6	= 20 g/kg (Rat)	= 20800 mg/kg (Rabbit)	Not available
Dipotassium phosphate 7758-11-4	Not available	Not available	Not available

Delayed and immediate effects as well as chronic effects from short and long-term exposure**Skin corrosion/irritation**

No significant irritation expected from a single short-term exposure. Repeated contact may cause flaking and softening of skin.

Serious eye damage/eye irritation

May cause slight transient (temporary) eye irritation.

Respiratory or skin sensitization

No information available.

Germ cell mutagenicity

No information available.

Carcinogenicity

No information available.

Chemical Name	ACGIH	IARC	NTP	OSHA
Water 7732-18-5	Not available	Not available	Not available	Not available
Propylene glycol 57-55-6	Not available	Not available	Not available	Not available
Dipotassium phosphate 7758-11-4	Not available	Not available	Not available	Not available

Reproductive toxicity

No information available.

Specific target organ systemic toxicity - single exposure

No information available.

Specific target organ systemic toxicity - repeated exposure

No information available.

Aspiration hazard

No information available.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Ecotoxicity - Freshwater Algae Data	Ecotoxicity - Fish Species Data	Toxicity to microorganisms	Crustacea
Water 7732-18-5	Not available	Not available	Not available	Not available
Propylene glycol 57-55-6	19000 mg/L EC50 Pseudokirchneriella subcapitata 96 h	41 - 47 mL/L LC50 (Oncorhynchus mykiss) 96 h static 51400 mg/L LC50 (Pimephales promelas) 96 h static 51600 mg/L LC50 (Oncorhynchus mykiss) 96 h static 710 mg/L LC50 (Pimephales promelas) 96 h	Not available	EC50: >1000mg/L (48h, Daphnia magna) EC50: >10000mg/L (24h, Daphnia magna)
Dipotassium phosphate 7758-11-4	Not available	Not available	Not available	Not available

Persistence and degradability No information available.**Bioaccumulation** No information available.

Chemical Name	Partition coefficient
Water 7732-18-5	Not available
Propylene glycol 57-55-6	Not available

Dipotassium phosphate 7758-11-4	Not available
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Other adverse effects No information available.

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Do not reuse empty containers.

14. TRANSPORT INFORMATION

TDG (Canada):

UN Number Not applicable
Shipping name Not regulated
Class Not applicable
Packing Group Not applicable
Marine pollutant Not available.

DOT (U.S.)

UN Number Not applicable
Shipping name Not regulated
Class Not applicable
Packing Group Not applicable
Marine pollutant Not available

15. REGULATORY INFORMATION

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

U.S. Regulatory Rules

Chemical Name	CERCLA/SARA - Section 302:	SARA (311, 312) Hazard Class:	CERCLA/SARA - Section 313:
Water - 7732-18-5	Not Listed	Not Listed	Not Listed
Propylene glycol - 57-55-6	Not Listed	Not Listed	Not Listed
Dipotassium phosphate - 7758-11-4	Not Listed	Not Listed	Not Listed

International Inventories

TSCA All components of this product are either on the Toxic Substances Control Act (TSCA) Inventory List or exempt.

DSL/NDSL All components of this product are either on the Domestic Substances List (DSL), the Non-Domestic Substances List (NDSL) or exempt.

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

16. OTHER INFORMATION

<u>NFPA:</u>	Health hazards 0	Flammability 0	Instability 0	Physical and chemical properties
<u>HMIS:</u>	Health hazards 0	Flammability 0	Physical hazards 0	- Personal protection X

Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation

Prepared By: The Environment, Health and Safety Department of Univar Canada Ltd.

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End of Safety Data Sheet

Region	The following sections have been revised: Revision Note 2.0	Canada
Template name	HGHS	
Inhalation Statement	Liquid or Aerosol	
Inhalation	No significant irritation expected from a single short-term exposure.	
Conditions to avoid	Moisture.	
Possibility of hazardous reactions	No additional remark.	
Symptoms	In animals, blood effects have been reported.	
Note to physicians	Treatment based on sound judgment of physician and individual reactions of patient.	
Engineering controls	Use in a well ventilated area.	
Hand protection	4H(R).	

pH 9.5
 Kinematic viscosity - VALUE 1 6.3 cSt
 Physical state Liquid
 Flash point °C - VALUE 1 Not available.
 Boiling point / boiling range °C - VALUE 1 104
 Flash Point: Not available.

GHS Classification

Not Hazardous		Not classified					
Physical hazards		None					
Component	Exclude this non-hazardous chemical from toxicity and ecotoxicity calculations for LD/LC/EC50	mg/kg oral LD50 (rat)	LD50 (Dermal, Rat, mg/kg)	Inhalation LC50 - 4 hour - dust/mist - mg/L	Inhalation LC50 - 4 hour - gas - ppm	Inhalation LC50 - 4 hour - vapor - mg/L	Inhalation LC50 - 4 hour - vapor - mg/L
Water	-	-	-	-	-	-	-
7732-18-5 (30 - 60%)	-	-	-	-	-	-	-
Propylene glycol	-	-	-	-	-	-	-
57-55-6 (30 - 60%)	-	-	-	-	-	-	-
Dipotassium phosphate	-	-	-	-	-	-	-
7758-11-4 (1 - 5%)	-	-	-	-	-	-	-

Hazard statements EUH210 - Safety data sheet available on request
 Hazard statements The mixture does not meet the criteria for classification.
 Skin IF ON SKIN: Wash with plenty of soap and water
 Prevention Use only outdoors or in a well-ventilated area Wash hands thoroughly after handling
 Response Get medical advice/attention if you feel unwell
 Eyes If eye irritation persists: Get medical advice/attention
 Skin IF ON SKIN: Wash with plenty of soap and water
 Storage Store locked up
 Disposal Disposal of all wastes must be done in accordance with municipal, provincial and federal regulations

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)	42,553.00
Units	mg/kg
ATEmix (dermal)	44,255.00
Units	mg/kg
Unknown acute toxicity	2.5 % of the mixture consists of component(s) of unknown hazards to the aquatic environment
Unknown Acute Aquatic Toxicity	2.5
Unknown Chronic Aquatic Toxicity	2.5
Product ATE Oral Status	1
Product ATE Dermal Status	1
Product ATE Inhalation - Gas Status	1
Product ATE Inhalation - Vapor Status	1
Product ATE Inhalation - Dust/Mist Status	1
Product Skin Corrosion Status	1
Product Eye Damage Status	1
Product Respiratory Sens. Status	1
Product Skin Sensitization Status	1
Product Mutagenic Status	1
Product Carcinogenic Status	1
Product Reproductive Toxicity Status	1
Product STOT Single Status	1
Product STOT Repeated Status	1
Product Aquatic Toxicity Status	1
Product Aspiration Toxicity Status	1
Product Ozone Status	1
Product and Component Overall Classification Status	1
Unknown acute toxicity	No information available
Unknown acute toxicity	100

- 2.5 % of the mixture consists of ingredient(s) of unknown acute oral toxicity
- 2.5 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity
- 49.5 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas)
- 49.5 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapor)
- 49.5 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist)