



SAFETY DATA SHEET

SOLAR MATE

HD8005/HD80045

Preparation Date: 05/Oct/2018

Version: 1

1. IDENTIFICATION

Product identifier

Product Name SOLAR MATE

Other means of identification

Product Code(s) HD8005-HD80045
none

Synonyms

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 Ltd.
295 ALLIANCE RD # 14
MILTON, ON L9T 4W8
Telephone: 1-905-876-0707

Emergency telephone number

24 Hour Emergency Phone Number (CANUTEC): 1-613-996-6666

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.

Other Information**Unknown acute toxicity** No information available**3. COMPOSITION/INFORMATION ON INGREDIENTS****Substance**

Not applicable.

Mixture

Chemical Name	CAS No	Weight-%	Synonyms
Propylene glycol	57-55-6	42 - 55%	Propylene glycol
Water	7732-18-5	42 - 55%	Water
Inhibitor	7758-11-4	1-12%	Inhibitor

4. FIRST AID**Description of first aid measures****Inhalation**

Remove to fresh air. If not breathing, give artificial respiration. Seek immediate medical attention/advice.

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. Get medical attention if irritation develops and persists.

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. Prolonged contact is essentially non irritating to skin. Repeated contact may cause flaking and softening of skin. Prolonged skin contact is unlikely to result in absorption of harmful amounts. In rare cases, repeated excessive exposure to propylene glycol may cause central nervous system effects.

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

Provide symptomatic/supportive care as necessary.

5. FIRE-FIGHTING MEASURES**Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Specific hazards arising from the substance or mixture

Isolate and restrict area access. Use fine water spray or fog to control fire spread and cool adjacent structures or containers. Move containers from fire area if you can do it without risk. Violent steam generation or eruption may occur upon application of direct water stream to hot liquids. Fight fire from a safe distance and from a protected location. Consider use of unmanned hose holder or monitor nozzles.

Hazardous combustion products

Oxides of carbon.

Special protective equipment 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

Ensure adequate ventilation.

Environmental precautions

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

Methods and materials for containment and cleaning up

Isolate hazard area and restrict access. Absorb with an inert dry material and place in an appropriate waste disposal container. Avoid direct contact with material.

7. HANDLING AND STORAGE

Precautions for safe handling

No special handling required. Keep the containers closed when not in use. 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

Store in a cool, dry, well ventilated area, away from heat and ignition sources. Place away from incompatible materials. Store in accordance with good industrial practices.

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
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
Water 7732-18-5	Not available	Not available	Not available	Not available	Not available	Not available
Inhibitor 7758-11-4	Not available	Not available	Not available	Not available	Not available	Not available

Appropriate engineering controls**Engineering controls**

Use in a well ventilated area. Provide general and/or local exhaust ventilation to control airborne levels below the exposure guidelines.

Individual protection measures, such as personal protective equipment**Eye/face protection**

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

Hand protection

Impervious gloves.

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

In misty atmospheres, use an approved mist respirator.

General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES**PHYSICAL/CHEMICAL PROPERTIES**

Appearance	YELLOW
Odour	ODOURLESS
Boiling Point	370 °F 188°C
Vapour Pressure	0.22 mmHg@20°C
Vapour Density (Air=1);	2.62
Solubility in water:	COMPLETE
Specific Gravity:	1.0380(20/20C).68°F

FIRE AND EXPLOSION HAZARD

Initial boiling point	370 °F / 306°C
Flash point	214 °F /101°C
Method Used:	TAG, Closed Cup
Flammability Limit in Air	LFL: 2.3% UFL: 13.7%
Extinguishing Media;	WATER FOG, ALCOHOL FOAM, CO2, DRY CHEMICAL
Fire & Explosion Hazards	NOT AVAILABLE
Fire Fighting Equipment	WEAR POSITIVE-PRESSURE, SELF-CONTAINED BREATHING APPARATUS.
Hazardous Decomposition	PROPIONALDEHYDE, CARBON MONOXIDE IN THE PRESENCE OF LIMITED OXYGEN IN FIRE SITUATION

REACTIVITY DATA

Stability:	STABLE UNDER NORMAL STORAGE CONDITIONS
Incompatibility	(SPECIFIC MATERIALS TO AVOID) -OXIDIZING MATERIAL
Hazardous Polymerization:	WILL NOT OCCUR

Decomposition temperature	No data available	None known
Kinematic viscosity	No data available	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.

Conditions to avoid

High temperatures.

Incompatible materials

Strong acids and bases. Contact with oxidizing agents.

Hazardous decomposition products

Oxides of carbon.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Inhalation

No significant irritation expected from a single short-term exposure. In rare cases, repeated excessive exposure to propylene glycol may cause central nervous system effects.

Eye contact

May cause slight transient (temporary) eye irritation.

Skin contact

Prolonged contact is essentially non irritating to skin. Repeated contact may cause flaking and softening of skin. Prolonged skin contact is unlikely to result in absorption of harmful amounts.

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) 34,483.00 mg/kg
ATEmix (dermal) 35,862.00 mg/kg

Unknown acute toxicity No information available

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

Prolonged contact is essentially non irritating to skin. Repeated contact may cause flaking and softening of skin. Prolonged skin contact is unlikely to result in absorption of harmful amounts.

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
Propylene glycol 57-55-6	Not available	Not available	Not available	Not available
Water 7732-18-5	Not available	Not available	Not available	Not available
Inhibitor 7758-11-4	Not available	Not available	Not available	Not available

Reproductive toxicity

In vitro genetic toxicity studies were negative. Animal genetic toxicity studies were negative.

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
Propylene glycol	19000 mg/L EC50	41 - 47 mL/L LC50	Not available	EC50: >1000mg/L (48h,

57-55-6	Pseudokirchneriella subcapitata 96 h	(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		Daphnia magna)
Water 7732-18-5	Not available	Not available	Not available	Not available
Inhibitor 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
Propylene glycol 57-55-6	Not available
Water 7732-18-5	Not available
Inhibitor 7758-11-4	Not available

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

Regulatory Rules

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

International Inventories

TSCA Complies
DSL/NDSL Complies

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, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

NFPA: Health hazards 0 Flammability 1 Instability 0 Physical and chemical properties -
HMIS Health Rating: Health hazards 0 Flammability 1 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

Preparation Date: 05/Oct/2018
Revision Date: 05/Oct/2018

Disclaimer

NOTICE TO READER:

The information contained in this form is based on data from sources considered technically reliable and has been provided in good faith in accordance with the available material. It is provided as a service to the persons using the product but conditions of use and handling may involve other and additional consideration beyond our control. No warranty, expressed or implied, is made and we will not be liable for any damages, losses, injuries or consequential damages which may result from the use or reliance on any information in this form.

