





Material Safety Data Sheet # 382

Hercules Chemical Company Inc.
111 South Street
Passaic NJ 07055-7398
Information Telephone: 1-800 221-9330
Internet: www.herchem.com

NFPA	HMIS	PPE	Transport Symbol						
	<table><tr><td>Health Hazard</td><td>0</td></tr><tr><td>Fire Hazard</td><td>0</td></tr><tr><td>Reactivity</td><td>0</td></tr></table>	Health Hazard	0	Fire Hazard	0	Reactivity	0		
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Fire Hazard	0								
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Preparation Date 07-Jul-2006

Revision Date 15-Jul-08

Revision Number 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name Hercules Solar System Antifreeze
Recommended Use Antifreeze

Supplier Address
Hercules Chemical Company, Inc.
111 South St.
Passaic, NJ 07055
TEL: 973-778-5000

Company Emergency Phone Number 1-800-221-9330
Emergency Telephone Number Chemtrec 1-800-424-9300

2. HAZARDS IDENTIFICATION

Emergency Overview

The product contains no substances which at their given concentration, are considered to be hazardous to health

Appearance Green

Physical State Liquid

Odor Odorless

Potential Health Effects

Principle Routes of Exposure

Skin contact, Eye contact.

Acute Effects

Eyes

May cause irritation.

Skin

May cause skin irritation and/or dermatitis.

Inhalation

None known.

Ingestion

Ingestion may cause stomach discomfort.

Chronic Effects

No known effect based on information supplied

Aggravated Medical Conditions

Skin disorders.

Potential Environmental Effects

See Section 12 for additional Ecological information

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %
Propylene Glycol	57-55-6	30-60
NJTSR # 31348300 5065P	Proprietary	1-5

4. FIRST AID MEASURES

Eye Contact	Rinse thoroughly with plenty of water, also under the eyelids. If symptoms persist, call a physician.
Skin Contact	Wash skin with soap and water
Inhalation	Move to fresh air
Ingestion	Clean mouth with water and afterwards drink plenty of water
Notes to Physician	Treat symptomatically

5. FIRE-FIGHTING MEASURES

Flammable Properties	Not flammable
Flash Point	No data available
Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Hazardous Combustion Products	Carbon oxides, Phosphorus oxides.
Explosion Data	
Sensitivity to mechanical impact	Not sensitive
Sensitivity to static discharge	Not sensitive

Protective Equipment and Precautions for Firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

NEPA	Health 0	Flammability 0	Instability 0	Physical Hazard -
HMIS	Health 0	Flammability 0	Instability 0	

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Use personal protective equipment. Avoid contact with the skin and the eyes.
Methods for Containment	Prevent further leakage or spillage if safe to do so.
Methods for Clean-up	Soak up with inert absorbent material. Pick up and transfer to properly labeled containers.

7. HANDLING AND STORAGE

Handling	Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin and eyes.
Storage	Keep containers tightly closed in a cool, well-ventilated place. Keep out of the reach of children.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines	This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.
Engineering Controls	Showers Eyewash stations Ventilation systems
Personal Protective Equipment	
Eye/face Protection	Safety glasses with side-shields.
Skin Protection	No special protective equipment required
Respiratory Protection	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn.

General Hygiene Considerations

Wash hands before breaks and at the end of workday. When using, do not eat, drink or smoke. Remove and wash contaminated clothing before re-use.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Green	Odor	Odorless
Physical State	Liquid	pH	7.0-8.5
Flash Point	No data available	Autoignition Temperature	Not applicable
Boiling Point/Range	110°C / 230°F	Melting Point/Range	No data available
Flammability Limits in Air	No data available		
Specific Gravity	1.05	Water Solubility	Soluble in water
Solubility	No data available	VOC Content	None

10. STABILITY AND REACTIVITY

Chemical Stability	Stable under recommended storage conditions.
Conditions to Avoid	None known based on information supplied.
Incompatible Materials	Strong oxidizing agents.
Hazardous Decomposition Products	Carbon monoxide, Carbon dioxide (CO ₂).
Hazardous Polymerization	Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Product Information	Product has not been tested as a whole for acute toxicity hazard.
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Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Propylene Glycol	20000 mg/kg (Rat)	20800 mg/kg (Rabbit)	

Chronic Toxicity

Carcinogenicity	There are no known carcinogenic chemicals in this product.
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Reproductive Effects	This product does not contain any known or suspected reproductive hazards.
Target Organ Effects	None known
Endocrine Disruptor Information	This product does not contain any known or suspected endocrine disruptors.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Contains no substances known to be hazardous to the environment.

Chemical Name	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Propylene Glycol	EC50 = 19000 mg/L 96 h		EC50 = 710 mg/L 30 min	EC50 > 10000 mg/L 48 h

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method

This material, as supplied, is not a hazardous waste according to Federal regulations (40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Consult 40 CFR 261 to determine whether the altered material is a hazardous waste. Consult the appropriate state, regional, or local regulations for additional requirements.

Contaminated Packaging

Dispose of in accordance with local regulations.

14. TRANSPORT INFORMATION

DOT Not regulated

TDG Not regulated

MEX Not regulated

ICAO Not regulated

IATA Not regulated

IMDG/IMO Not regulated

15. REGULATORY INFORMATION**International Inventories**

TSCA	Complies
DSL/NDL	Complies
EINECS/ELINCS	Does not Comply
ENCS	Does not Comply
CHINA	Does not Comply
KECL	Does not Comply
PICCS	Does not Comply
AICS	Does not Comply

U.S. Federal Regulations**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Acute Health Hazard	No
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

U.S. State Regulations**California Proposition 65**

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical Name	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
NJTSR # 31348300 5065P		X			

International Regulations

Mexico - Grade Minimum risk, Grade 0

Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

WHMIS Hazard Class

Non-controlled

16. OTHER INFORMATION

Preparation Date	07-Jul-2006
Revision Date	07-15-2008
Revision Summary	No information available

Disclaimer

The information provided on this MSDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as 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 material or in any process, unless specified in the text.

End of MSDS