

MATERIAL SAFETY DATA SHEET

PART 1 *What is the material and what do I need to know in an emergency?*

1. PRODUCT IDENTIFICATION

TRADE NAME (AS LABELED): **SPP Corn Glycol**
CHEMICAL NAME/CLASS: Propylene Glycol
SYNONYMS: Inhibited 1,3- propylene glycol / Inhibited 1,3-Propandiol

DISTRIBUTORS NAME: **Solar Panels Plus LLC**
ADDRESS: 533 Byron Street E
Chesapeake VA 23320

EMERGENCY PHONE: 1-800-424-9300 (CHEMTREC)
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DATE OF PREPARATION: Sept 4, 2008

2. COMPOSITION AND INFORMATION ON INGREDIENTS

CHEMICAL NAME	CAS #	% w/v	EXPOSURE LIMITS IN AIR					
			ACGIH		OSHA			
			TLV mg/m ³	STEL mg/m ³	PEL mg/m ³	STEL mg/m ³	IDLH mg/m ³	OTHER mg/m ³
1,3 Propanediol	504-63-2		NE	NE	NE	NE	NE	NE
Inhibitor Solution			None of the ingredients in the Inhibitor Solution contribute any significant, additional hazard to these products. All pertinent hazard information has been provided in this Material Safety Data Sheet, per the requirements of the Federal OSHA Hazard Communication Standard (29 CFR 1910.1200) and State equivalent standards.					

NE = Not Established

C = Ceiling Level

See Section 16 for Definitions of Terms Used.

NOTE: All WHMIS required information is included. It is located in appropriate sections based on the ANSI Z400.1-1993 format.

3. HAZARD IDENTIFICATION

SYMPTOMS OF OVER-EXPOSURE BY ROUTE OF EXPOSURE:

The most significant routes of exposure to this product are by inhalation of the vapors and contact with the skin and eyes.

CONTACT WITH SKIN OR EYES:

Based on animal data, skin contact with pure, Corn Glycol may cause dermatitis with itching or rash. Based on animal data, no adverse effects are expected from incidental eye contact with Corn Glycol.

INGESTION:

Based on animal data, ingestion of Corn Glycol may cause liver abnormalities.

CARCINOGENICITY INFORMATION:

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

HMIS Rating
Health 1
Flammability 1
Reactivity 0

PART II *What should I do if a hazardous situation occurs?*

4. FIRST-AID MEASURES

SKIN EXPOSURE:

Flush skin with water after contact. Wash contaminated clothing before reuse.

EYE EXPOSURE:

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

INHALATION:

If inhaled remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Call a physician.

INGESTION:

If swallowed, do not induce vomiting. Immediately give 2 glasses water. Never give anything by mouth to an unconscious person. Call a physician.

Notes to Physician: No antidote or specific regimens known. Use supportive measures as needed.

5. FIRE-FIGHTING MEASURES

FLASH POINT, °C (method):

131°C (268°F), Cleveland Open Cup-COC

This material will burn. It is not an explosion hazard.

FIRE EXTINGUISHING MATERIALS:

Water Spray: YES (cooling only)

Carbon Dioxide: YES

Halon: YES

Dry Chemical: YES

Other: Any "ABC" Class

Foam: YES

SPECIAL FIRE-FIGHTING PROCEDURES:

Evacuate personnel to safe area. Keep personnel removed and upwind of fire. Wear self-contained breathing apparatus. Avoid breathing vapor. Use water spray to knock down vapor.

NFPA Rating

Health 1
Flammability 1
Reactivity 0

6. ACCIDENTAL RELEASE MEASURES

SPILL AND LEAK RESPONSE:

Uncontrolled releases should be responded to by trained personnel using pre-planned procedures. Proper protective equipment should be used. In case of an uncontrolled release, clear the affected area, protect people, and respond with trained personnel.

SMALL SPILL:

Cover with absorbent material (floor absorbent, vermiculite, etc.) Soak up spill and place material into a drum.

LARGE SPILL:

Personnel involved with large releases should wear protective equipment. Stop spill at source, dike the area surrounding the spill to prevent further exposure. Prevent material from entering sewer system. If necessary, absorbents such as vermiculite, clay floor absorbent may be used on spill and shoveled into drums.

PART III *How can I prevent hazardous situations from occurring?*

7. HANDLING AND STORAGE

STORAGE AND HANDLING PRACTICES:

Avoid breathing vapor or mist. Avoid contact with eyes, skin or clothing. Wash thoroughly after handling. Avoid prolonged or repeated exposure. Keep container tightly closed. Keep away from heat, sparks and flames. Store in a cool, dry place.

8. EXPOSURE CONTROLS- PERSONAL PROTECTION

VENTILATION AND ENGINEERING CONTROLS:

Keep container tightly closed. Mechanical exhaust required. Keep away from heat and open flames. Store in a cool dry place.

RESPIRATORY PROTECTION:

Where there is a potential for airborne exposure, wear appropriate NIOSH approved respiratory protection.

EYE PROTECTION:

Wear coverall chemical splash goggles or safety glasses.

HAND/BODY PROTECTION:

Where there is potential for skin contact have available, and wear appropriate, impervious gloves, aprons, pants, and jacket.

PERSONAL PROTECTIVE EQUIPMENT LEVEL: D

9. PHYSICAL AND CHEMICAL PROPERTIES

MELTING POINT:

-24°C (-11°F)

EVAPORATION RATE:

<1 (Butyl Acetate=1.0)

SPECIFIC GRAVITY (water = 1):

1.053

SOLUBILITY IN WATER:

Soluble

VAPOR PRESSURE:

0.08mm Hg @ 20°C (68°F)

BOILING POINT:

214°C (417°F)

pH:

Neutral

APPEARANCE AND COLOR:

This product is a colorless, odorless, syrupy liquid with a faint, chemical odor. Alternate colors are available, pending customer preferences.

10. STABILITY AND REACTIVITY

STABILITY:

Stable at normal temperatures and storage conditions.

DECOMPOSITION PRODUCTS:

Decomposition is not known. Hazardous gases/vapors produced are methanol and acrolein in the vapor.

MATERIALS WITH WHICH SUBSTANCE IS INCOMPATIBLE:

None reasonably foreseeable.

HAZARDOUS POLYMERIZATION:

Polymerization may occur under extreme conditions between minor components but has not been experienced.

PART IV *Is there any other useful information about this material?*

11. TOXICOLOGICAL INFORMATION

TOXICITY DATA:

Additional toxicology information for components greater listed in Section 2 (Composition and Information on Ingredients) in concentration is provided below.

Animal Data for Corn Glycol

Oral LD50:	15,000 mg/kg in rats
Dermal LD50:	>20,000 mg/kg in rabbits
Inhalation 4 hour ALC:	>5.0 mg/L in rats

USPECTED CANCER AGENT:

The ingredients of this product are not listed on the following lists: FEDERAL OSHA Z LIST, NTP, IARC or CAL/OSHA, and therefore are not considered to be, nor suspected to be, cancer-causing agents by these agencies.

IRRITANCY OF PRODUCT:

This product is not an eye irritant, is a slight skin irritant, and is not a skin sensitizer.

REPRODUCTIVE TOXICITY INFORMATION:

Animal data shows that Corn Glycol is not uniquely toxic to the fetus. Information about reproductive toxicity potential is limited to information from the oral repeated dose study in rats where no adverse effect to sperm and reproductive organs were observed. Corn Glycol is not likely to be a genetic toxic. In vitro, it was not mutagenic in bacterial or mammalian cells. Corn Glycol was also negative in the vivo mouse micronucleus assay.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:

Repeated exposure of rats by oral gavage caused no toxicologically important changes in clinical pathology, pathology (including sperm analysis), or in-life measurements. The NOEL for the study was 1000 mg/kg/day, the highest dose tested. These results suggest that changes to testicular DNA and liver structure observed in earlier studies are unlike to cause adverse effects.

INHALATION EXPOSURE:

Repeated inhalation exposure in rats caused no toxicologically important changes in clinical pathology, or in-life measurements. The NOEL was 1800mg/m³.

BIOLOGICAL EXPOSURE INDICES:

Currently, there are no Biological Indices (BEIs) associated with the components of this product.

12. ECOLOGICAL INFORMATION

ALL WORK PRACTICES MUST BE AIMED AT ELIMINATING ENVIRONMENTAL CONTAMINATION.

ENVIRONMENTAL STABILITY:

The components of this product will be degraded over time into other inorganic and organic compounds. The following information is available for the components of this product:

AQUATIC TOXICITY:

Low toxicity

40 hour EC50 - Daphnia magna: 7417 mg/L

72 hour EC50 - algae: 1600 mg/L

96 hour EC50 - fathead minnow: >9720

13. DISPOSAL CONSIDERATIONS

PREPARING WASTES FOR DISPOSAL:

Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations.

EPA WASTE NUMBER:

Not applicable to wastes consisting only to wastes of this product.

14. TRANSPORTATION INFORMATION

SHIPPING INFORMATION:

Not regulated as a hazardous material by DOT, IMO, or IATA.

15. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS

TSCA INVENTORY STATUS

The components of this product are listed on the TSCA Inventory.

16. OTHER INFORMATION

PREPARED BY:

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533 Byron Street #E
Chesapeake VA 23320
757-549-1494

Date of Printing:

Sept 4, 2008

The information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of these data or the results to be obtained from the use thereof. Solar Panels Plus LLC (SPP) assumes no responsibility for injury to the vendee or third persons proximately caused by the material if reasonable safety procedures are not adhered to as stipulated in the data sheet. Additionally, SPP assumes no responsibility for injury to vendee or third persons proximately caused by abnormal use of the material even if reasonable safety procedures are followed. Furthermore, vendee assumes the risk in his used of the material.

DEFINITION OF TERMS

Key/Legend

ppm = parts per million; mg/3 = milligrams per cubic meter of air; mppcf = million particles per cubic foot of air; f/cc = fibers per cubic centimeter of air; OSHA = Occupational Safety and Health Administration; ACGIH = American Conference of Governmental Industrial Hygienists; TLV = Threshold Limit Value; TWA = 8-hour, time weighted average; STEL = short-term exposure limit; EPA = Environmental Protection Agency; TSCA = Toxic Substances Control Act; DSL = Canada Domestic Substances List; EINECS = European Inventory of Existing Commercial Chemical Substances; ECL = Korea Existing and Evaluated Chemical Substances Inventory; ENCS = Japan Existing and New Chemical Substances Inventory; PICCS = Philippines Inventory of Chemicals and Chemical Substances; AICS = Australia Inventory of Chemical Substances; IARC = International Agency for Research on Cancer; NIOSH = National Institute for Occupational Safety and Health; NTP = National Toxicology Program; PMN = Premanufacture Notification; DSL = Domestic Substances List; NFPA = National Fire Protection Association; WHMIS = Workplace Hazardous Material Identification System; HEPA = High Efficiency Particulate Air; CERCLA = Comprehensive Environmental Response, Compensation and Liability Act; SARA = Superfund Amendments and Reauthorization Act; NJTSR = New Jersey Trade Secret Registry; EPCRA = Emergency Planning and Community Right-to-Know Act (SARA, Title III); 302 = Extremely Hazardous Substance; HAP = Clean Air Act Hazardous Air Pollutant; TPQ = Threshold Planning Quantity; RQ = Reportable Quantity; NA = Not Available; NR = Not Regulated