

Glass Gleam Solar

GLASS CLEANER CONCENTRATE

1. PRODUCT AND COMPANY IDENTIFICATION

1.1. Product Name:	Glass Gleam Solar, Solar Panel Glass Cleaner Concentrate
1.2. Chemical Name	Proprietary Blend.
1.3. Synonyms:	None
1.4. Trade Names:	Glass Gleam Solar, GG-Solar
1.5. Product Use:	Cleaning solar panels and boxed/glazed solar hot water panels
1.6. Manufacturer's Name:	Titan Laboratories, Inc.
1.7. Manufacturer's Address:	1071 Wright Avenue * Mountain View, CA 94043 * USA
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1.10. Business Phone:	650-965-9900 or 800-475-3300 North America
1.11. Emergency Phone:	800-475-3300, ChemTel 888-255-3924 North America, +01-813-248-0580 Intl.

2. COMPOSITION & INGREDIENTS

2.1. Ingredient:	<p>Proprietary. None of the ingredients have been identified as hazardous within OSHA's Hazard Communication Standard 29 CFR 1091.1200.</p> <p>NONTOXIC, BIODEGRADABLE</p> <p>CAS NO: Not Applicable</p> <p>Exposure limits in air (mg/m3)% Not Determined, expected value to be trivial, based on a review of the raw materials.</p>
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3. IDENTIFICATION OF RISKS

3.1. Hazard identification::	
3.2. Routes Of Entry:	Inhalation: NO Skin & Eyes: YES Ingestion: YES
3.3. Effects Of Exposure:	<p>EYES: Concentrate is a possible mild eye irritant</p> <p>SKIN: Possible irritation and dermatitis (rash) for prolonged exposure, same as for water. Not skin sensitizing.</p> <p>INGESTION: Large quantity: Possible gastrointestinal discomfort, or diarrhea</p> <p>INHALATION: No adverse health effects expected</p> <p>NOTE: Relatively low health hazards at recommended dilution of 1:500</p>
3.4. Symptoms Of Exposure	<p>EYES: See 3.3</p> <p>SKIN: See 3.3</p> <p>INGESTION: See 3.3</p> <p>INHALATION: See 3.3</p>
3.5. Acute Health Effects:	<p>EYES: See 3.3</p> <p>SKIN: See 3.3</p> <p>INGESTION: See 3.3</p> <p>INHALATION: See 3.3</p>
3.6. Chronic Health Effects:	None known
3.7. Target Organs:	None known
3.8. Toxicological Properties:	None known

4. FIRST AID MEASURES

4.1. First Aid	<p>EYES: Flush eyes with water for 10 minutes while holding eyelids open. Remove contact lenses if worn. If irritation persists, see a physician.</p> <p>INGESTION: If swallowed in quantity, see a physician and treat as soap or detergent ingestion. MINOR INGESTION: Rinse mouth, drink water.</p> <p>SKIN: Rinse affected areas with water. If irritation develops, see a physician</p> <p>INHALATION: No first aid treatment expected</p>
4.2. Medical Conditions Aggravated by Exposure	None known

5. FIRE-FIGHTING MEASURES

5.1. Flashpoint and Method:	None (TCC)
5.2. Autoignition Temperature:	None
5.3. Flammability Limits:	Lower Explosive Limit: N/A Upper Explosive Limit: N/A
5.4. Fire & Explosion Hazards:	None known
5.5. Extinguishing Methods:	None required
5.6. Firefighting Procedures:	None required. Product is nonflammable and non-combustible..

6. ACCIDENTAL RELEASE MEASURES

6.1. Spills:	Stop spill or leak at source if safely possible. Pick up excess with mop, dustpan, or we/dry vacuum or absorbant. Wash residue to sewer. Product is nontoxic, neutral pH and biodegradable.
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7. HANDLING AND STORAGE

7.1. Work & Hygiene Practices:	Use normal hygiene practices. Wash hands thoroughly after using this product and before eating, drinking, or smoking.
7.2. Storage & Handling:	Store in a closed container between 32°F and 150°F (0°C and 65°C). Do not store in unmarked containers or storage devices.
7.3. Special Precautions:	Keep out of reach of children

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Ventilation & Engineering Controls:	None required
8.2. Respiratory Protection:	None required
8.3. Eye Protection:	If exposed to splashing, safety glasses with side shield recommended
8.4. Hand Protection:	Where prolonged skin contact is likely, impervious gloves are recommended, primarily from the risks of any prolonged aqueous liquid exposure. Do not wear rings, watches, or jewelry that could entrap the liquid against the skin.
8.5. Body Protection:	None required under normal conditions.

9. SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Density:	1.028
9.2. Boiling Point:	213°F (100.5°C)
9.3. Melting Point:	32°F (0°C)
9.4. Evaporation Rate	1.0 (water = 1)
9.5. Vapor Pressure:	20 mm Hg @ 25°C
9.6. Molecular Weight:	NA

9.7. Appearance & Color:	Liquid, pleasant odor, yellow color
9.8. Odor Threshold:	Fragrance, no adverse indication if detected
9.9. Solubility:	100%
9.10. pH:	Neutral, approx. 7.2
9.11. Viscosity:	0.94 cP (Similar to water)
9.12. Coefficient Oil / Water Distribution:	Not applicable
9.13. Additional Information:	

10. STABILITY AND REACTIVITY

10.1. Stability:	Stable under normal conditions
10.2. Decomposition Products:	CO and CO ₂ when incinerated
10.3. Polymerization:	Will not occur
10.4. Conditions To Avoid:	None known
10.5. Incompatible Substances:	None known

11. TOXICOLOGICAL INFORMATION

11.1. Toxicity Data:	No general or specific toxicity data has been determined other than the information presented in Section 3. However, good personal hygiene practices such as washing any skin contact areas and removing contaminated clothing are recommended.
11.2. Acute Toxicity:	See section 3.5
11.3. Chronic Toxicity	None known
11.4. Suspected Carcinogen:	No
11.5. Reproductive Toxicity:	No
11.6. Mutagenicity:	This product is not expected to cause mutagenic effects in humans.
11.7. Embryotoxicity:	This product is not expected to cause embryotoxic effects in humans.
11.8. Teratogenicity:	This product is not expected to cause teratogenic effects in humans.
11.9. Reproductive Toxicity:	This product is not expected to cause reproductive harm in humans.
11.10. Irritancy of Product:	Minor
11.11. Biological Exposure Indices:	No BEI has been determined. Believed to be a low risk hazard.
11.12. Medical Recommendations:	Treat symptomatically

12. ECOLOGICAL INFORMATION

12.1. Environmental Stability:	A literature review indicates this product is environmentally friendly. All raw materials are bio-based. It is sold in a highly concentrated form to reduce packaging waste and transportation carbon release. Contains no hazardous ingredients, phosphates or ammonia, Neutral pH. Non-carcinogenic. Biodegradable under conditions of OECD 301F.
12.2. Effect on Plants & Animals:	Negligible in normal usage. The effect of large spills on plants and animals has not been determined, but the risk seems low.
12.3. Effect on Aquatic Life:	Not determined. Believed negligible risk in normal usage. The effect on aquatic life stemming from large spills has not been determined, but product packaging of end-user containers of 5 gallons (18.9L) or smaller makes major spills unlikely.

13. DISPOSAL CONSIDERATIONS

13.1. Waste Disposal:	Sewer, landfill or incinerate in accordance with federal, state, and provincial hazardous waste laws.
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13.2. Special Considerations:	None known
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14. TRANSPORTATION INFORMATION

14.1. 49 CFR (Ground):	Not Regulated
14.2. IATA (Air):	Not Regulated
14.3. IMDG (Ocean):	Not Regulated
14.4. TDGR (Canada Ground):	Not Regulated

15. REGULATORY INFORMATION

15.1. SARA Reporting Requirements:	This product does not contain any substances subject to SARA reporting requirements.
15.2. Toxic Substances Control Act (TSCA)	All the components of this product are listed on the TSCA Inventory of Existing Chemical Substances.

16. OTHER INFORMATION

16.1. Other Information:	This product has been classified according to the hazard criteria of the U.S. Occupational Safety & Health Administration's Hazard Communications Standards and Health Canada's controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR. The components of this product are listed on the DSL/NDSL. None of the components of this product are listed on the priorities substances list.									
16.2. NFPA 704 Hazard Identification rating (National Fire Protection Association)	<table border="0"> <tr> <td>Acute Health</td> <td>Fire</td> <td>Reactivity</td> </tr> <tr> <td>0</td> <td>0</td> <td>0</td> </tr> <tr> <td colspan="3">0= Least 1= Slight 2= Moderate 3= High 4=Extreme</td> </tr> </table>	Acute Health	Fire	Reactivity	0	0	0	0= Least 1= Slight 2= Moderate 3= High 4=Extreme		
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16.3. Disclaimer:	<p>This material safety data sheet complies with U.S. OSHA's Hazard Communication Standard, 29 CFR § 1910.1200 and Health Canada's Workplace Hazardous Materials Information System (WHMIS).</p> <p>To the best of Titan Laboratories' knowledge, the information contained herein is reliable and accurate as of preparation date; however, accuracy, suitability or completeness are not guaranteed and no warranties of any type, either expressed or implied, are provided. The information contained herein relates only to the specific product. Contact the manufacturer for additional information.</p>									
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