

MATERIAL SAFETY DATA SHEET
SOLAR FLUX TYPE I

I. PRODUCT IDENTIFICATION

Manufacturer: GOLDEN EMPIRE CORPORATION
P.O. Box 2129, Morehead City, North Carolina, 28557
(252) 808-3511 FAX (252) 808-3711
Chemical and Synonyms: none CAS No.: none
Trade Name and Synonyms: SOLAR FLUX TYPE I UN No.: none
Chemical Family: none Formula: Trade secret per 29 CFR 191.1200 (i) (1) & Appendix D

II. HAZARDOUS INGREDIENTS

Material or Component	CAS No.	%	Hazard Data
Free crystalline silica	14808-60-7	1-4	ACGIH TLV for free crystalline is 3.8 to 4.3 mg/m ³ total dust: 1.4 to 1.7 mg/m ³ respirable dust. Repeated inhalation and prolonged over-exposure above TLV could result in delayed lung injury (Silicosis), cancer, or irritation.
Sodium fluoride	7681-49-4	15-18	
Non-hazardous ingredients		88-94	

III. PHYSICAL DATA

Boiling Point, 760 mm Hg	3060 degrees F.	Melting Point	none
Specific Gravity (H ₂ O=1)	2.2	Vapor Pressure	none
Vapor Density (Air=1)	none	Solubility in H ₂ O, % by wt.	4.2 gm/100ml
% Volatiles by Volume	none	Evaporation Rate	zero
Appearance and Odor	white powder odorless	pH (as is)	
		pH (at dilution)	not applicable

IV. FIRE AND EXPLOSION DATA

Flash Point: none Auto Ignition : none Flammable Limits: none Lower: none
Temperature: In Air, %by volume Upper:
Extinguishing Media: any
Special Fire Fighting Procedures: none - water may be used
Unusual Fire and Explosion Hazard: none

V. HEALTH HAZARD INFORMATION

Routes of Exposure

Inhalation Solar Flux is primarily a nuisance dust. But see section II (above), Hazardous Ingredients, for data on Silica and Sodium Fluoride components.
Skin Contact Irritant
Skin Absorption none
Eye Contact Irritant
Ingestion Irritant

Effects of Overexposure

Acute Overexposure See section II (above), Hazardous ingredients
Chronic Overexposure Same as above

Emergency and First Aid Procedures

Eyes Rinse with large quantities of water. Get medical attention
Skin Wash with soap and large quantities of water. Get medical attention
Inhalation Keep area well-ventilated to prevent inhaling dust. Remove person to fresh air. Get medical attention.
Ingestion Drink plenty of water. Get medical attention immediately.
Notes to Physician: Not applicable

VI. REACTIVITY DATA

Conditions Contributing to Instability:	none
Incompatibility (Materials to Avoid):	strong acids or thermal decomposition may cause evolution of Hydrogen Fluoride Gas
Hazardous Decomposition Products:	cause evolution of Hydrogen Fluoride Gas
Conditions Contributing to Hazardous Polymerization:	none

VII. SPILL OR LEAK PROCEDURES

Steps to be taken if material is released or spilled:	Inert dry powder. Sweep up and discard in solid waste.
Neutralizing chemicals:	not applicable
Waste disposal method of spill or leak:	Dispose of in accordance with federal, state, and local regulations.

VIII. SPECIAL PROTECTION INFORMATION

Ventilation Requirements	Well-ventilated area. Local exhaust. Standard for welding
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Specific Personal Protection Equipment

Respiratory (specify in detail)	Wear NIOSH-approved respirator
Eye	Standard for welding
Gloves	Standard for welding
Other clothing and equipment	Standard for welding

IX. SPECIAL PRECAUTIONS

Labeling Information and Warnings:	Contains silica. Use in well-ventilated area.	
Data for Hazards Information Label:	Flammability = 0	
Hazard Code:	Health = 0	
4 = Extreme	1 = Slight	Reactivity = 0
3 = High	0 = Insignificant	Special = 0
2 = Moderate		

Other handling and storage requirements: none

X. DISPOSAL

Waste disposal method:	No special precautions. See section VII (above) Spill or Leak Procedures
Aquatic Toxicity:	none

XI. GOVERNMENT REGULATIONS

<u>Reference to Applicable Government Regulations</u>	<u>Regulation Highlights</u>
Federal	
29 CFR 1910.1200 et. seq.	General Statute, all chemicals
IATA - various - DOT	Solar Flux Type B can be shipped by any method. No special label or precautions required.
State	
CALIFORNIA PROP. 65	Contains silica, a chemical known to the state of California to cause cancer.
Other	
CANADA - W.H.M.I.S - Dept. of Trans.	See part II, re silica See above for IATA & DOT

Prepared by:

R. L. Wehrmeister
GOLDEN EMPIRE CORPORATION
P.O. Box 2129
Morehead City, North Carolina 28557
(252) 808-3511
FAX (252) 808-3711

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