

Issuing Date 23-May-2011

Revision Date

Revision Number 0

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name Sunshield Solar Reflective Coating

Product Code(s) 110

Recommended Use Refer to the Product Data Sheet for Additional Information.

Supplier Address

Neyra Industries, Inc.
 10700 Evendale Drive
 Cincinnati, Ohio 45241
 TEL: (513) 733-1000

Company Emergency Phone Number (513) 733-1000

2. HAZARDS IDENTIFICATION

WARNING!

Emergency Overview

Irritating to eyes

May cause skin irritation

WARNING! This product contains a chemical known in the State of California to cause birth defects or other reproductive harm.

Appearance Gray

Physical State Liquid.

Odor Ammonia, Slight

OSHA Regulatory Status Health hazards listed are for all colors.

Potential Health Effects

Principle Routes of Exposure Inhalation. Skin contact. Eye contact.

Acute Toxicity

Eyes

Severely irritating to eyes.

Skin

May cause irritation.

Inhalation

May cause irritation of respiratory tract.

Ingestion

Ingestion may cause irritation to mucous membranes.

Chronic Effects

May cause adverse effects on the bone marrow and blood-forming system. May cause adverse liver effects. This product contains crystalline silica (quartz) in a non-respirable form. Inhalation of crystalline silica is unlikely to occur from exposure to this product. Crystalline silica (quartz) has been classified by the International Agency for Research on Cancer (IARC) as a known human carcinogen (Group 1). This product contains titanium dioxide in a non-respirable form. Inhalation of titanium dioxide is unlikely to occur from exposure to this product. Titanium dioxide has been classified by the International Agency for Research on Cancer (IARC) as possibly carcinogenic to humans (Group 2B) by inhalation.

Aggravated Medical Conditions

Pre-existing eye disorders. Skin disorders. Respiratory disorders.

Environmental Hazard

See Section 12 for additional Ecological Information.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS-No	Weight %
Quartz	14808-60-7	10-20
Titanium dioxide	13463-67-7	3-5
Black Pigment	Proprietary	1-5
Butoxyethanol	111-76-2	1-3

4. FIRST AID MEASURES

Eye Contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Call a physician immediately.
Skin Contact	Wash off with warm water and soap. If symptoms persist, call a physician.
Inhalation	Move to fresh air. If symptoms persist, call a physician.
Ingestion	Do NOT induce vomiting. Drink plenty of water. Never give anything by mouth to an unconscious person. Consult a physician.
Notes to Physician	Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Flammable Properties	Not flammable.			
Flash Point	Not determined.			
Suitable Extinguishing Media	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.			
Hazardous Combustion Products	Carbon oxides. Hydrocarbons.			
Explosion Data				
Sensitivity to Mechanical Impact	None			
Sensitivity to Static Discharge	None			
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.			
NFPA	Health Hazard 2	Flammability 0	Instability 0	Physical and Chemical Hazards -
HMIS	Health Hazard 2*	Flammability 0	Physical Hazard 0	Personal Protection X

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions	Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes and clothing.
Environmental Precautions	Do not allow material to contaminate ground water system. Do not flush into surface water or sanitary sewer system.
Methods for Containment	Dike far ahead of liquid spill for later disposal.
Methods for Cleaning Up	Dam up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Sweep up and shovel into suitable containers for disposal.

7. HANDLING AND STORAGE

Handling	Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Wash thoroughly after handling.
Storage	Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children. Keep from freezing.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Butoxyethanol 111-76-2	TWA: 20 ppm	TWA: 50 ppm TWA: 240 mg/m ³ (vacated) TWA: 25 ppm (vacated) TWA: 120 mg/m ³ (vacated) S*	IDLH: 700 ppm TWA: 5 ppm TWA: 24 mg/m ³
Black Pigment	TWA: 0.5 mg/m ³ Cr	TWA: 0.5 mg/m ³ Cr (vacated) TWA: 0.5 mg/m ³ Cr	IDLH: 25 mg/m ³ Cr(III) TWA: 0.5 mg/m ³ Cr
Titanium dioxide 13463-67-7	TWA: 10 mg/m ³	TWA: 15 mg/m ³ total dust (vacated) TWA: 10 mg/m ³ total dust	IDLH: 5000 mg/m ³
Quartz 14808-60-7	TWA: 0.025 mg/m ³ respirable fraction	TWA: 0.1 mg/m ³ (vacated)	IDLH: 50 mg/m ³ respirable dust TWA: 0.05 mg/m ³ respirable dust

OSHA PEL: Occupational Safety and Health Administration - Permissible Exposure Limits. ACGIH TLV: American Conference of Governmental Industrial Hygienists - Threshold Limit Value. NIOSH IDLH: Immediately Dangerous to Life or Health.

Other Exposure Guidelines	Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).
Engineering Measures	Showers Eyewash stations Ventilation systems
Personal Protective Equipment	
Eye/Face Protection	Tightly fitting safety goggles.
Skin and Body Protection	Wear protective gloves/clothing.
Respiratory Protection	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.
Hygiene Measures	When using, do not eat, drink or smoke. Provide regular cleaning of equipment, work area and clothing. Keep away from food, drink and animal feeding stuffs.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Gray.	Odor	Ammonia, Slight.
Odor Threshold	No information available.	Physical State	Liquid.
pH	7.0 - 9.0	Autoignition Temperature	No information available.
Flash Point	No information available.	Boiling Point/Boiling Range	100°C
Decomposition Temperature	No information available.	Explosion Limits	No information available.
Melting Point/Range	No information available.	Water Solubility	Partly soluble.
Flammability Limits in Air	No information available.	Evaporation Rate	No information available.
Specific Gravity	1.66	Vapor Density	No data available.
Solubility	No information available.		
Vapor Pressure	No data available.		
EPA VOC (g/l)	49		

10. STABILITY AND REACTIVITY

Stability	Stable under recommended storage conditions.
Incompatible Products	Acids. Multivalent metal salts.
Conditions to Avoid	Do not freeze.
Hazardous Decomposition Products	Acrylates. Methacrylates. Thermal decomposition may result in the release of toxic or flammable products.
Hazardous Polymerization	Hazardous polymerization does not occur.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity

Product Information Product does not present an acute toxicity hazard based on known or supplied information.

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
Butoxyethanol	= 470 mg/kg (Rat)	220 mg/kg (Rabbit) 2270 mg/kg (Rat)	= 2.21 mg/L (Rat) 4 h = 450 ppm (Rat) 4 h
Titanium dioxide	> 10000 mg/kg (Rat)		
Quartz	500 mg/kg (Rat)		

Chronic Toxicity

Chronic Toxicity

May cause adverse effects on the bone marrow and blood-forming system. May cause adverse liver effects. This product contains crystalline silica (quartz) in a non-respirable form. Inhalation of crystalline silica is unlikely to occur from exposure to this product. Crystalline silica (quartz) has been classified by the International Agency for Research on Cancer (IARC) as a known human carcinogen (Group 1). This product contains titanium dioxide in a non-respirable form. Inhalation of titanium dioxide is unlikely to occur from exposure to this product. Titanium dioxide has been classified by the International Agency for Research on Cancer (IARC) as possibly carcinogenic to humans (Group 2B) by inhalation.

Carcinogenicity

The table below indicates whether each agency has listed any ingredient as a carcinogen.

Chemical Name	ACGIH	IARC	NTP	OSHA
Quartz	A2	Group 1	Known	X
Titanium dioxide		Group 2B		
Black Pigment		Group 3		
Butoxyethanol	A3	Group 3		

ACGIH: (American Conference of Governmental Industrial Hygienists)

A2 - Suspected Human Carcinogen

A3 - Animal Carcinogen

IARC: (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

Group 2B - Possibly Carcinogenic to Humans

Group 3: Not Classifiable as to its Carcinogenicity to Humans

NTP: (National Toxicity Program)

Known - Known Carcinogen

OSHA: (Occupational Safety & Health Administration)

X - Present

Target Organ Effects

Blood. Central nervous system (CNS). Kidney. Respiratory system.

12. ECOLOGICAL INFORMATION

Ecotoxicity

The environmental impact of this product has not been fully investigated.

Chemical Name	Toxicity to Algae	Toxicity to Fish	Toxicity to Microorganisms	Daphnia Magna (Water Flea)
Butoxyethanol		LC50 96 h: = 1490 mg/L static (Lepomis macrochirus) LC50 96 h: = 2950 mg/L (Lepomis macrochirus)		EC50 24 h: 1698 - 1940 mg/L (Daphnia magna) EC50 48 h: > 1000 mg/L (Daphnia magna)

Chemical Name	Log Pow
Butoxyethanol	0.81

13. DISPOSAL CONSIDERATIONS

Waste Disposal Methods This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261).

Contaminated Packaging Do not re-use empty containers. Observe all labeled safeguards until container is cleaned, reconditioned or destroyed.

US EPA Waste Number D007

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste
Black Pigment	Toxic Corrosive Ignitable

14. TRANSPORT INFORMATION

DOT Not regulated

TDG Not regulated

MEX Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA Complies
DSL Complies

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory
DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

U.S. Federal Regulations

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.

Chemical Name	CAS-No	Weight %	SARA 313 - Threshold Values %
Butoxyethanol	111-76-2	1.65	1.0
Black Pigment		1.66	1.0

SARA 311/312 Hazard Categories

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
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).

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Black Pigment		X		

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

U.S. State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals:

Chemical Name	CAS-No	California Prop. 65
Quartz	14808-60-7	Carcinogen

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania	Illinois	Rhode Island
Butoxyethanol	X	X	X	X	X
Titanium dioxide		X			X
Quartz	X	X	X	-	X
Black Pigment			X	X	X

International Regulations

Chemical Name	Carcinogen Status	Exposure Limits
Butoxyethanol		Mexico: TWA 26 ppm Mexico: TWA 120 mg/m ³ Mexico: STEL 75 ppm Mexico: STEL 360 mg/m ³
Black Pigment		Mexico: TWA 0.5 mg/m ³
Titanium dioxide		Mexico: TWA 10 mg/m ³ Mexico: STEL 20 mg/m ³
Quartz		Mexico: TWA= 0.1 mg/m ³
Magnesium oxide		Mexico: TWA 10 mg/m ³

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

D2A Very toxic materials

D2B Toxic materials

**16. OTHER INFORMATION**

Prepared By	Product Stewardship 23 British American Blvd. Latham, NY 12110 1-800-572-6501
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Revision Date	
Revision Note	Initial Release.

General 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 Safety Data Sheet