SAFETY DATA SHEET

1. Identification

Material name: SOLARGARD 6083 SCC ROMAN BLUE 5 GL
Material: 1120509205P

Recommended use and restriction on use

Recommended use: Coatings
Restrictions on use: Not known.

Manufacturer/Importer/Supplier/Distributor Information

Tremco Incorporated
3735 Green Road
BEACHWOOD OH 44122
US

Contact person:	EH&S Department
Telephone:	216-292-5000
Emergency telephone number:	1-800-424-9300 (US); 1-613-996-6666 (Canada)

2. Hazard(s) identification

Hazard Classification

Health Hazards

Germ Cell Mutagenicity	Category 1B
Carcinogenicity	Category 2
Toxic to reproduction	Category 1B

Unknown toxicity - Health

Acute toxicity, oral	32.7 %
Acute toxicity, dermal	37.73 %
Acute toxicity, inhalation, vapor	100 %
Acute toxicity, inhalation, dust or mist	99.77 %

Environmental Hazards

Acute hazards to the aquatic environment	Category 3

Unknown toxicity - Environment

Acute hazards to the aquatic environment	93.74 %
Chronic hazards to the aquatic environment	100 %

Label Elements

Hazard Symbol:

Signal Word: Danger

Hazard Statement: May cause genetic defects.
Suspected of causing cancer.
May damage fertility or the unborn child.
Harmful to aquatic life.

Precautionary Statements

Prevention: Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required.

Response: IF exposed or concerned: Get medical advice/attention.

Storage: Store locked up.

Disposal: Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Hazard(s) not otherwise classified (HNOC): None.

3. Composition/information on ingredients

Mixtures

Chemical Identity	CAS number	Content in percent (%)*
Titanium dioxide	13463-67-7	3 - 7%
Propylene glycol	57-55-6	1 - 5%
Aluminum oxide	1344-28-1	0.1 - 1%
n-(3,4-dichlorophenyl)-n,n-dimethylurea	330-54-1	0.1 - 1%
Trade Secret	Trade Secret	0.1 - 1%
Methyl benzimidazole-2-yl carbamate	10605-21-7	0.1 - 1%

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

Ingestion: Rinse mouth thoroughly.

Inhalation: Move to fresh air.

Skin Contact:	Remove contaminated clothing and wash the skin thoroughly with soap and water after work.
Eye contact:	Rinse immediately with plenty of water.

Most important symptoms/effects, acute and delayed

Symptoms:	May cause skin and eye irritation.

Indication of immediate medical attention and special treatment needed

Treatment:	Symptoms may be delayed.

5. Fire-fighting measures

General Fire Hazards:	No unusual fire or explosion hazards noted.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media:	Use fire-extinguishing media appropriate for surrounding materials.
Unsuitable extinguishing media:	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical:	During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters

Special fire fighting procedures:	No data available.
Special protective equipment for fire-fighters:	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures:	No data available.
Methods and material for containment and cleaning up:	Dam and absorb spillages with sand, earth or other non-combustible material. Collect spillage in containers, seal securely and deliver for disposal according to local regulations.
Notification Procedures:	In the event of a spill or accidental release, notify relevant authorities in accordance with all applicable regulations.
Environmental Precautions:	Avoid release to the environment. Prevent further leakage or spillage if safe to do so.

7. Handling and storage

Precautions for safe handling: Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Use personal protective equipment as required. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities: Store locked up.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values	Source
Titanium dioxide	TWA	10 mg/m3	US. ACGIH Threshold Limit Values (2011)
Titanium dioxide - Total dust.	PEL	15 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Titanium dioxide - Respirable fraction.	TWA	15 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)
Titanium dioxide - Total dust.	TWA	15 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)
Titanium dioxide - Respirable fraction.	TWA	5 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)
Titanium dioxide - Total dust.	TWA	50 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)
Aluminum oxide - Respirable fraction.	TWA	1 mg/m3	US. ACGIH Threshold Limit Values (2011)
	PEL	5 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Aluminum oxide - Total dust.	PEL	15 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	TWA	50 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)
Aluminum oxide - Respirable fraction.	TWA	15 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)
	TWA	5 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)
Aluminum oxide - Total dust.	TWA	15 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)
n-(3,4-dichlorophenyl)-n,n-dimethylurea	TWA	10 mg/m3	US. ACGIH Threshold Limit Values (2011)
Trade Secret - Respirable fraction.	TWA	2 mg/m3	US. ACGIH Threshold Limit Values (2011)
	PEL	5 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Trade Secret - Total dust.	PEL	15 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	TWA	50 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)
Trade Secret - Respirable	TWA	15 millions of	US. OSHA Table Z-3 (29 CFR 1910.1000) (03

fraction.		particles per cubic foot of air	2016)
	TWA	5 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)
Trade Secret - Total dust.	TWA	15 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000) (03 2016)

Chemical name	Type	Exposure Limit Values	Source
Titanium dioxide - Total dust.	TWA	10 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Titanium dioxide - Respirable fraction.	TWA	3 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Titanium dioxide	TWA	10 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Titanium dioxide - Total dust.	TWA	10 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)
Propylene glycol - Aerosol.	TWA	10 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Propylene glycol - Vapor and aerosol.	TWA	50 ppm 155 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (06 2015)

Appropriate Engineering Controls Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of vapors and mist. Mechanical ventilation or local exhaust ventilation may be required.

Individual protection measures, such as personal protective equipment

General information: Use personal protective equipment as required.

Eye/face protection: Wear goggles/face shield.

Skin Protection

Hand Protection: Use suitable protective gloves if risk of skin contact.

Other: No data available.

Respiratory Protection: In case of inadequate ventilation use suitable respirator. Seek advice from local supervisor.

Hygiene measures: Observe good industrial hygiene practices. Wash hands before breaks and immediately after handling the product. Do not handle until all safety precautions have been read and understood. Obtain special instructions before use.

9. Physical and chemical properties

Appearance

Physical state: liquid

Form: liquid

Color: Blue

Odor: Mild

Odor threshold:	No data available.
pH:	8 - 10
Melting point/freezing point:	No data available.
Initial boiling point and boiling range:	No data available.
Flash Point:	No data available.
Evaporation rate:	Slower than Ether
Flammability (solid, gas):	No
Upper/lower limit on flammability or explosive limits	
Flammability limit - upper (%):	No data available.
Flammability limit - lower (%):	No data available.
Explosive limit - upper (%):	No data available.
Explosive limit - lower (%):	No data available.
Vapor pressure:	No data available.
Vapor density:	Vapors are heavier than air and may travel along the floor and in the bottom of containers.
Relative density:	1.462
Solubility(ies)	
Solubility in water:	Soluble
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	No data available.
Auto-ignition temperature:	No data available.
Decomposition temperature:	No data available.
Viscosity:	No data available.

10. Stability and reactivity

Reactivity:	No data available.
Chemical Stability:	Material is stable under normal conditions.
Possibility of hazardous reactions:	No data available.
Conditions to avoid:	Avoid heat or contamination.
Incompatible Materials:	Strong acids. Strong bases.
Hazardous Decomposition Products:	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors.

11. Toxicological information

Information on likely routes of exposure

Inhalation:	In high concentrations, vapors, fumes or mists may irritate nose, throat and mucus membranes.
Skin Contact:	Moderately irritating to skin with prolonged exposure.
Eye contact:	Eye contact is possible and should be avoided.

Ingestion: May be ingested by accident. Ingestion may cause irritation and malaise.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation: No data available.

Skin Contact: No data available.

Eye contact: No data available.

Ingestion: No data available.

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral

Product: Not classified for acute toxicity based on available data.

Specified substance(s):

Titanium dioxide	LD 50 (Rat): > 5,000 mg/kg
Propylene glycol	LD 50 (Rat): 22,000 mg/kg
Aluminum oxide	LD 50 (Rat): > 10,000 mg/kg
n-(3,4-dichlorophenyl)-n,n-dimethylurea	LD 50 (Rat): 4,150 mg/kg
Trade Secret	LD 50 (Rat): > 5,000 mg/kg
Methyl benzimidazole-2-yl carbamate	LD 50 (Rat): 6,400 mg/kg

Dermal

Product: ATEmix: 59,540.4 mg/kg

Inhalation

Product: Not classified for acute toxicity based on available data.

Specified substance(s):

Titanium dioxide	LC 50 (Rat): 3.43 mg/l
Aluminum oxide	LC 50 (Rat): 7.6 mg/l
n-(3,4-dichlorophenyl)-n,n-dimethylurea	LC 50 (Rat): > 223 mg/m3

Repeated dose toxicity
Product: No data available.

Skin Corrosion/Irritation
Product: No data available.

Specified substance(s):

Titanium dioxide	in vivo (Rabbit): Not irritant Experimental result, Supporting study
Propylene glycol	in vivo (Rabbit): Not irritant Experimental result, Key study
Aluminum oxide	in vivo (Rabbit): Not irritant Experimental result, Key study
n-(3,4-dichlorophenyl)-n,n-dimethylurea	Possibly Irritating in vivo (Rabbit): Not irritant Experimental result, Key study

Serious Eye Damage/Eye Irritation
Product: No data available.
Specified substance(s):

Titanium dioxide	Rabbit, 24 hrs: Not irritating
Aluminum oxide	Rabbit, 24 hrs: Not irritating

Respiratory or Skin Sensitization
Product: No data available.

Carcinogenicity
Product: Suspected of causing cancer.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

Titanium dioxide	Overall evaluation: Possibly carcinogenic to humans.

US. National Toxicology Program (NTP) Report on Carcinogens:
No carcinogenic components identified

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):
No carcinogenic components identified

Germ Cell Mutagenicity

In vitro
Product: No data available.

In vivo
Product: No data available.

Reproductive toxicity
Product: May damage fertility or the unborn child.

Specific Target Organ Toxicity - Single Exposure
Product: No data available.

Specific Target Organ Toxicity - Repeated Exposure
Product: No data available.

Aspiration Hazard
Product: No data available.

Other effects: No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish
Product: No data available.

Specified substance(s):

Propylene glycol	LC 50 (Fathead minnow (Pimephales promelas), 96 h): 29,485 - 39,339 mg/l Mortality
n-(3,4-dichlorophenyl)-n,n-dimethylurea	LC 50 (Fathead minnow (Pimephales promelas), 96 h): 13.4 - 15 mg/l Mortality
Methyl benzimidazole-2-yl carbamate	LC 50 (Bluegill (Lepomis macrochirus), 96 h): > 3.2 mg/l Mortality

Aquatic Invertebrates
Product: No data available.

Specified substance(s):

Titanium dioxide	EC 50 (Water flea (Daphnia magna), 48 h): > 1,000 mg/l Intoxication

Propylene glycol	EC 50 (Water flea (Daphnia magna), 48 h): > 10,000 mg/l Intoxication
n-(3,4-dichlorophenyl)-n,n-dimethylurea	EC 50 (Water flea (Daphnia pulex), 48 h): 1.4 mg/l Mortality

Chronic hazards to the aquatic environment:

Fish
Product: No data available.

Specified substance(s):

Propylene glycol	NOAEL (Pimephales promelas, 7 d): 11,530 mg/l Experimental result, Not specified

Aquatic Invertebrates
Product: No data available.

Toxicity to Aquatic Plants
Product: No data available.

Persistence and Degradability

Biodegradation
Product: No data available.

BOD/COD Ratio
Product: No data available.

Bioaccumulative potential
Bioconcentration Factor (BCF)
Product: No data available.

Partition Coefficient n-octanol / water (log Kow)
Product: No data available.

Specified substance(s):

Propylene glycol	Log Kow: -0.92
n-(3,4-dichlorophenyl)-n,n-dimethylurea	Log Kow: 2.68
Methyl benzimidazole-2-yl carbamate	Log Kow: 1.52

Mobility in soil: No data available.

Other adverse effects: Harmful to aquatic organisms.

13. Disposal considerations

Disposal instructions: Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Contaminated Packaging: No data available.

14. Transport information

TDG:

Not Regulated

CFR / DOT:

Not Regulated

IMDG:

Not Regulated

15. Regulatory information

US Federal Regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

None present or none present in regulated quantities.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

Chemical Identity	Reportable quantity
n-(3,4-dichlorophenyl)-n,n-dimethylurea	100 lbs.
Methyl benzimidazole-2-yl carbamate	10 lbs.
Ammonium hydroxide	1000 lbs.
Sodium nitrite	100 lbs.
Barium sulfate	1000 lbs.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Delayed (Chronic) Health Hazard

SARA 302 Extremely Hazardous Substance

None present or none present in regulated quantities.

SARA 304 Emergency Release Notification

Chemical Identity	Reportable quantity
n-(3,4-dichlorophenyl)-n,n-dimethylurea	100 lbs.
Methyl benzimidazole-2-yl carbamate	10 lbs.
Ammonium hydroxide	1000 lbs.
Pigment phthalocyanine blue	
Sodium nitrite	100 lbs.
Barium sulfate	1000 lbs.

SARA 311/312 Hazardous Chemical

Chemical Identity	Threshold Planning Quantity
Titanium dioxide	10000 lbs
Propylene glycol	10000 lbs
Aluminum oxide	10000 lbs
n-(3,4-dichlorophenyl)-n,n-dimethylurea	10000 lbs
Trade Secret	10000 lbs
Methyl benzimidazole-2-yl carbamate	10000 lbs

SARA 313 (TRI Reporting)

None present or none present in regulated quantities.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

None present or none present in regulated quantities.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

None present or none present in regulated quantities.

US State Regulations

US. California Proposition 65

This product contains chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm.

Titanium dioxide	Carcinogenic. 09 2011
n-(3,4-dichlorophenyl)-n,n-dimethylurea	Carcinogenic. 09 2011

US. New Jersey Worker and Community Right-to-Know Act

Chemical Identity
Titanium dioxide
Propylene glycol

US. Massachusetts RTK - Substance List

Chemical Identity
Titanium dioxide

US. Pennsylvania RTK - Hazardous Substances

Chemical Identity
Titanium dioxide
Propylene glycol

US. Rhode Island RTK

No ingredient regulated by RI Right-to-Know Law present.

International regulations

Montreal protocol

Not applicable

Stockholm convention

Not applicable

Rotterdam convention

Not applicable

Kyoto protocol

Not applicable

VOC:

Regulatory VOC (less water and exempt solvent)	:	37 g/l
VOC Method 310	:	1.35 %

Inventory Status:

Australia AICS:	One or more components in this product are not listed on or exempt from the Inventory.
Canada DSL Inventory List:	One or more components in this product are not listed on or exempt from the Inventory.
EINECS, ELINCS or NLP:	One or more components in this product are not listed on or exempt from the Inventory.
Japan (ENCS) List:	One or more components in this product are not listed on or exempt from the Inventory.
China Inv. Existing Chemical Substances:	One or more components in this product are not listed on or exempt from the Inventory.
Korea Existing Chemicals Inv. (KECI):	One or more components in this product are not listed on or exempt from the Inventory.
Canada NDSL Inventory:	One or more components in this product are not listed on or exempt from the Inventory.
Philippines PICCS:	One or more components in this product are not listed on or exempt from the Inventory.
US TSCA Inventory:	One or more components in this product are not listed on or exempt from the Inventory.
New Zealand Inventory of Chemicals:	One or more components in this product are not listed on or exempt from the Inventory.
Japan ISHL Listing:	One or more components in this product are not listed on or exempt from the Inventory.
Japan Pharmacopoeia Listing:	One or more components in this product are not listed on or exempt from the Inventory.

16.Other information, including date of preparation or last revision

Revision Date:	06/08/2018
Version #:	1.2
Further Information:	No data available.

Disclaimer: For Industrial Use Only. Keep out of Reach of Children. The hazard information herein is offered solely for the consideration of the user, subject to their own investigation of compliance with applicable regulations, including the safe use of the product under every foreseeable condition.