

Version: 1.0 Revision Date: 08/17/2015

SAFETY DATA SHEET

1. Identification

Material name: SOLARGARD H.B. SCC MEDIUM BRONZE 53 GL Material: 1512042653D

Recommended use and restriction on use

Recommended use: Coatings Restrictions on use: Not known.

Manufacturer/Importer/Supplier/Distributor Information

Tremco U.S. Roofing 3735 Green Road Cleveland OH 44122 US

Contact person: Telephone: Emergency telephone number:

EH&S Department 216-292-5000 1-800-424-9300 (US); 1-613-996-6666 (Canada)

2. Hazard(s) identification

Hazard Classification

Health Hazards

Carcinogenicity	Category 1A
Unknown toxicity - Health	
Acute toxicity, oral	63.59 %
Acute toxicity, dermal	65.02 %
Acute toxicity, inhalation, vapor	100 %
Acute toxicity, inhalation, dust or mist	99.84 %
Unknown toxicity - Environment	
Acute hazards to the aquatic environment	93.61 %
Chronic hazards to the aquatic environment	100 %

Label Elements

Hazard Symbol:



Signal Word:

Danger

Hazard Statement:

May cause cancer.

Precautionary Statement:



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.
Other hazards which do not result in GHS classification:	None.

3. Composition/information on ingredients

Mixtures

Chemical Identity	CAS number	Content in percent (%)*
Crystalline Silica (Quartz)/ Silica Sand	14808-60-7	1 - 5%
Propylene glycol	57-55-6	1 - 5%
Zinc oxide	1314-13-2	1 - 5%
**	**	1 - 5%
Titanium dioxide	13463-67-7	1 - 5%
Clay	1332-58-7	0.1 - 1%
Talc	14807-96-6	0.1 - 1%
Ammonium hydroxide	1336-21-6	0.1 - 1%

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

Trade secret information:

** A specific chemical identity and/or percentage of composition has been withheld as a trade secret.

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 symptom	s/effects, acute and delayed
Symptoms:	May cause skin and eye irritation.
Indication of immediate me	edical attention and special treatment needed
Treatment:	Symptoms may be delayed.
5. Fire-fighting measure	S



General Fire Hazards:

Suitable (and unsuitable) ex	tinguishing 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	d 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	3
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. Do not contaminate water sources or sewer. Environmental manager must be informed of all major spillages.
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.

No unusual fire or explosion hazards noted.

8. Exposure controls/personal protection

Control Parameters Occupational Exposure Limits



Chemical Identity	type	Exposure Limit Values	Source
Crystalline Silica (Quartz)/ Silica Sand - Respirable fraction.	TWA	0.025 mg/m3	US. ACGIH Threshold Limit Values (2011)
Crystalline Silica (Quartz)/ Silica Sand - Respirable.	TWA	2.4 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)
	TWA	0.1 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)
Crystalline Silica (Quartz)/ Silica Sand - Total dust.	TWA	0.3 mg/m3	US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)
Zinc oxide - Respirable fraction.	TWA	2 mg/m3	US. ACGIH Threshold Limit Values (2011)
	STEL	10 mg/m3	US. ACGIH Threshold Limit Values (2011)
Zinc oxide - Fume.	PEL	5 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Zinc oxide - Total dust.	PEL	15 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Zinc oxide - Respirable fraction.	PEL	5 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
**	TWA	10 mg/m3	US. ACGIH Threshold Limit Values (2011)
	PEL	15 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	PEL	5 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
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)
Clay - 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)
Clay - Total dust.	PEL	15 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
Talc - Respirable fraction.	TWA	2 mg/m3	US. ACGIH Threshold Limit Values (2011)
Talc	TWA	20 millions of particles per cubic foot of air	US. OSHA Table Z-3 (29 CFR 1910.1000) (2000)
Talc - Respirable.	TWA	2.4	US. OSHA Table Z-3 (29 CFR



			millions of	1910.1000) (2000)
			particles	
			per cubic	
			foot of air	
	TWA		0.1 mg/m3	US. OSHA Table Z-3 (29 CFR
				1910.1000) (2000)
Talc - Total dust.	TWA		0.3 mg/m3	US. OSHA Table Z-3 (29 CFR
			-	1910.1000) (2000)
Ammonium hydroxide	STEL	35 ppm		US. ACGIH Threshold Limit Values
				(2011)
	TWA	25 ppm		US. ACGIH Threshold Limit Values
				(2011)
	PEL	50 ppm	35 mg/m3	US. OSHA Table Z-1 Limits for Air
			-	Contaminants (29 CFR 1910.1000)
				(02 2006)

Chemical name	type	Exposure Limit Values	Source
Crystalline Silica (Quartz)/ Silica Sand - Respirable fraction.	TWA	0.025 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Crystalline Silica (Quartz)/ Silica Sand - Respirable.	TWAEV	0.10 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Crystalline Silica (Quartz)/ Silica Sand - Respirable dust.	TWA	0.1 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)
Propylene glycol - Aerosol.	TWAEV	10 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Propylene glycol - Vapor and aerosol, inhalable fraction.	TWAEV	50 ppm 155 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Zinc oxide - Respirable.	TWA	2 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
	STEL	10 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Zinc oxide - Respirable fraction.	TWAEV	2 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
	STEL	10 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)



Zinc oxide - Fume.	TWA	5 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)
Zinc oxide - Total dust.	TWA	10 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)
Zinc oxide - Fume.	STEL	10 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)
Cellulose - 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)
Cellulose - 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)
Cellulose	TWAEV	10 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Cellulose - Total dust.	TWA	10 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)
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	TWAEV	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)
Talc - Respirable.	TWA	2 mg/m3	Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007)
Talc - Respirable particles.	TWAEV	2 mg/m3	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010)
Talc	TWAEV	2 fibers/mL	Canada. Ontario OELs. (Control of Exposure to Biological or Chemical



			Agents) (11 2010)
Talc - Respirable dust.	TWA	3 mg/m3	Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008)

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.

9. Physical and chemical properties

Appearance

Appoulation	
Physical state:	liquid
Form:	liquid
Color:	Brown
Odor:	Mild
Odor threshold:	No data available.
pH:	9 - 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	ve 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:	1.33
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		
Ingestion:	May be ingested by accident. Ingestion may cause irritation and malaise.	
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.	

Information on toxicological effects

Acute toxicity (li	ist all possible	routes of exposure)
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Oral Product:	No data available.
Dermal Product:	ATEmix: 13,719.35 mg/kg
Inhalation Product:	No data available.
Repeated dose toxicity	

No data available.

Product:



Skin Corrosion/Irritation Product:	No data available.	
Serious Eye Damage/Eye Irritati Product:	on No data available.	
Specified substance(s): Propylene glycol	(Human): Irritating	
Zinc oxide	in vivo (Rabbit, 24 - 72 hrs): Not irritating	
Titanium dioxide	in vivo (Rabbit, 24 - 72 hrs): Not irritating	
Ammonium hydroxide	Severely Irritating	
Respiratory or Skin Sensitizatio Product:	n No data available.	
Carcinogenicity Product:	No data available.	
IARC Monographs on the Evaluation	IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:	
Crystalline Silica (Quartz)/ Silica Sand	Overall evaluation: Carcinogenic to humans.	
Titanium dioxide	Overall evaluation: Possibly carcinogenic to humans.	
Talc	Overall evaluation: Not classifiable as to carcinogenicity to humans. Overall evaluation: Possibly carcinogenic to humans.	
Crystalline Silica (Quartz)/ Silica Sand	m (NTP) Report on Carcinogens: Known To Be Human Carcinogen.	
No carcinogenic com	d Substances (29 CFR 1910.1001-1050): ponents identified	
Germ Cell Mutagenicity		
In vitro Product:	No data available.	
In vivo Product:	No data available.	
Reproductive toxicity Product:	No data available.	



Specific Target Organ Toxici	ty - Single Exposure
Product:	No data available.
Specific Target Organ Toxici	ty - 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): 55,770 mg/l Mortality
Zinc oxide	LC 50 (Fathead minnow (Pimephales promelas), 96 h): 2,246 mg/l Mortality
Titanium dioxide	LC 50 (Mummichog (Fundulus heteroclitus), 96 h): > 1,000 mg/l Mortality
Ammonium hydroxide	LC 50 (Western mosquitofish (Gambusia affinis), 96 h): 15 mg/l Mortality
Aquatic Invertebrates Product:	No data available.
Specified substance(s): Propylene glycol	EC 50 (Water flea (Daphnia magna), 48 h): > 10,000 mg/l Intoxication EC 50 (Water flea (Daphnia magna), 24 h): > 10,000 mg/l Intoxication LC 50 (Brine shrimp (Artemia salina), 24 h): > 10,000 mg/l Mortality
Zinc oxide	LC 50 (Water flea (Daphnia magna), 48 h): 24.6 mg/l Mortality
Titanium dioxide	EC 50 (Water flea (Daphnia magna), 48 h): > 1,000 mg/l Intoxication
Ammonium hydroxide	LC 50 (Water flea (Daphnia magna), 25 h): 60 mg/l Mortality LC 50 (Water flea (Ceriodaphnia dubia), 48 h): > 0 - 10 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
Zinc oxide	NOAEL (Oncorhynchus mykiss, 30 d): 974 µg/l interpreted



Titanium dioxide	LC 0 (Coregonus autumnalis migratorius G., 30 d): 3 mg/l experimental result
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 (BC Product:	F) No data available.
Partition Coefficient n-octan Product:	ol / water (log Kow) No data available.
Specified substance(s): Propylene glycol	Log Kow: -0.92
Mobility in Soil:	No data available.
Other Adverse Effects:	No data available.
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)

Chemical Identity	<u>OSHA hazard(s)</u>
Acrylonitrile	Liver
	Central nervous system
	Flammability
	Eye irritation
	Skin irritation
	Skin sensitization
	Respiratory irritation
	Cancer
	Acute toxicity
	-

CERCLA Hazardous Substance List (40 CFR 302.4):

Chemical Identity	Reportable quantity
Ammonium hydroxide	1000 lbs.
n-(3,4-dichlorophenyl)-	100 lbs.
n,n-dimethylurea	
Methyl benzimidazole-2-	10 lbs.
yl carbamate	
Ammonia	100 lbs.
Acrylamide	5000 lbs.
Acrylonitrile	100 lbs.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Delayed (Chronic) Health Hazard

SARA 302 Extremely Hazardous Substance

	<u>Reportable</u>		
Chemical Identity	<u>quantity</u>	Threshold Planning Quantity	
Ammonia	100 lbs.	500 lbs.	
Acrylamide	5000 lbs.		
Acrylonitrile	100 lbs.	10000 lbs.	



SARA 304 Emergency Release Notification Chemical Identity Reportable quantity

Chemical Identity	Reportable
Zinc oxide	
Ammonium hydroxide	1000 lbs.
n-(3,4-dichlorophenyl)-	100 lbs.
n,n-dimethylurea	
Methyl benzimidazole-2-	10 lbs.
yl carbamate	
Ammonia	100 lbs.
Phthalocyanine green	
Acrylamide	5000 lbs.
Acrylonitrile	100 lbs.

SARA 311/312 Hazardous Chemical

Chemical Identity	Threshold Planning Quantity
Ammonia	500lbs
Acrylamide	500lbs
Acrylonitrile	500lbs
Crystalline Silica (Quartz)/	500 lbs
Silica Sand	
Propylene glycol	500 lbs
Zinc oxide	500 lbs
Cellulose	500 lbs
Titanium dioxide	500 lbs
Clay	500 lbs
Talc	500 lbs
Ammonium hydroxide	500 lbs

SARA 313 (TRI Reporting)

Chemical Identity

Zinc oxide

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

None present or none present in regulated quantities.

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

Chemical Identity	Reportable quantity
Ammonia	10000 lbs
Ammonia	20000 lbs
Acrylonitrile	20000 lbs

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.

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

Chemical Identity

Crystalline Silica (Quartz)/ Silica Sand Propylene glycol Zinc oxide Cellulose Titanium dioxide



US. Massachusetts RTK - Substance List

Chemical Identity

Crystalline Silica (Quartz)/ Silica Sand Zinc oxide Titanium dioxide Ammonia Acrylamide Acrylonitrile

US. Pennsylvania RTK - Hazardous Substances

Chemical Identity

Crystalline Silica (Quartz)/ Silica Sand Propylene glycol Zinc oxide Cellulose Titanium dioxide

US. Rhode Island RTK

Chemical Identity Zinc oxide

Other Regulations:

Regulatory VOC (less water	23 g/l
and exempt solvent):	
VOC Method 310:	0.97 %

Inventory Status:

Australia AICS:

Canada DSL Inventory List:

EINECS, ELINCS or NLP:

Japan (ENCS) List:

China Inv. Existing Chemical Substances:

Korea Existing Chemicals Inv. (KECI):

Canada NDSL Inventory:

Philippines PICCS:

One or more components in this product are not listed on or exempt from the Inventory.

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Version: 1.0 Revision Date: 08/17/2015

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:	08/17/2015
Version #:	1.0
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.