

SAFETY DATA SHEET

SOLADUR 800

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Soladur 800

PRODUCT NUMBER: CP-0055

RECOMMENDED USE: White Roof Coating. Reflective Roof Coating

RESTRICTION OF USE: For exterior use only. Do not use indoors

MANUFACTURER/SUPPLIER

Castagra Products, Inc.
 1450 Vassar Street
 Reno, NV 89502
 USA

24 HR EMERGENCY TELEPHONE NUMBERS

Emergency Contact Number: CHEMTREC 1-800-424-9300 / +1 703-527-3887

Non-Emergency Phone Number: +1 888-388-2935

2. HAZARDS IDENTIFICATION

Hazard Classification:

OSHA Regulatory Status

This chemical is not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Carcinogenicity: Category 2

Label Elements:



EMERGENCY OVERVIEW

Hazard statements: Suspected of causing cancer

Appearance: Viscous

Physical state: Liquid

Odor: Low

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

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention

Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

Not applicable

Other Information

Unknown acute toxicity 35% of the mixture consists of ingredient(s) of unknown toxicity

3. COMPOSITION / INFORMATION ON INGREDIENTS

Substance Mixture

This product is a mixture.

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Common name: White Roof Coating.

Synonyms: None.

Chemical nature: Aqueous solution.

Chemical Name	CAS No.	Weight-%	Trade Secret
Acrylic Co-Polymer	25035-69-2	30 - 40%	*
Calcium Carbonate	1317-65-3	30 - 40%	*
Water	7732-18-5	20 - 30%	*
Titanium Dioxide (Non Carcinogenic)	13463-67-7	10 - 20%	*
Ethylene glycol	107-21-1	0 - 10%	*

4. FIRST AID MEASURES

Description of first aid measures:

General advice: Under conditions of normal use, no hazards are anticipated which require special first aid measures.

Eye contact: In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Skin contact: Wash thoroughly with soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing before reuse. In the case of skin irritation or allergic reactions see a physician.

Inhalation: Move to fresh air in case of accidental inhalation of vapors. If continued difficulty with breathing is experienced, get medical attention immediately.

Ingestion: Not an expected route of exposure. If swallowed, do not induce vomiting. Get medical attention immediately.

Self-protection of the First aider: First aider: Pay attention to self-protection!

Most important symptoms and effects, both acute and delayed

Symptoms: May cause skin irritation. May cause eye irritation.

Indication of any immediate medical attention and special treatment needed

Note to physicians: Treat symptomatically.

5. FIRE FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Dry chemical. Carbon dioxide (CO₂). Sand. Use foam or water FOG as a last resort.

Unsuitable extinguishing media: Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

For Industrial Use Only.

Hazardous combustion products: Thermal decomposition (burning) may release irritating, corrosive and/or toxic gases, vapors and fumes.

Explosion data

Sensitivity to Mechanical Impact: Not sensitive.

Sensitivity to Static Discharge: Not sensitive.

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.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions: No action should be taken involving any personal risk or without suitable training. Use personal protective equipment as required.

Other Information: Extremely slippery when spilled.

For emergency responders: Use personal protection recommended in Section 8.

Environmental precautions

Environmental precautions: Avoid release to the environment. Prevent further leakage or spillage if safe to do so. Prevent product from entering sewers, drains, or waterways. Local authorities should be advised if significant spillages can not be contained. See Section 12 for additional ecological information.

Methods and material for containment and cleaning up

Methods for containment: Contain spillage with non-combustible absorbent material, e.g. sand, earth, diatomaceous earth, vermiculite.

Methods for cleaning up: Pick up the absorbed material (described just above) and transfer to properly labeled containers for disposal according to local / national regulations (see Section 13).

Prevention of secondary hazards: Clean contaminated objects and areas thoroughly observing environmental regulations.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling: Use personal protective equipment as required. Use only outdoors.

Conditions for safe storage, including any incompatibilities

Storage Conditions: Keep from freezing. Keep containers tightly closed in a cool, dry, well-ventilated place.

Incompatible materials: Strong acids. Strong oxidizing agents.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

Exposure Guidelines: No ACGIH or OSHA PEL is assigned to this mixture. Exposure limits for the component materials are shown below. This product, as supplied, is not believed to contain any hazardous material that exceeds exposure limits established by OSHA.

EXPOSURE LIMITS

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Calcium Carbonate 1317-65-3		TWA: 15 mg/m ³ total dust TWA: 5 mg/m ³ respirable fraction (vacated) TWA: 15mg/m ³ total dust (vacated) TWA: 5 mg/m ³ respirable fraction	TWA: 10 mg/m ³ total dust TWA: 5 mg/m ³ respirable dust
Titanium Dioxide (Non Carcinogenic) 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 TWA: 2.4 mg/m ³ CIB 63 fine TWA: 0.3 mg/m ³ CIB 63 ultrafine, including engineered nanoscale
Ethylene glycol 107-21-1	STEL: 50 ppm vapor fraction STEL: 10 mg/m ³ inhalable particulate matter, aerosol only TWA: 25 ppm vapor fraction	(vacated) Ceiling: 50 ppm (vacated) Ceiling: 125 mg/m ³	

Appropriate engineering controls

Engineering Controls: None under normal outdoor use conditions.

Individual protection measures, such as personal protective equipment

Eye/face protection: Wear safety glasses with side shields (or goggles).

Skin and body protection: Wear protective gloves and protective clothing that is resistant to chemical penetration.

Respiratory protection: No protective equipment is needed under normal use conditions.

General Hygiene Considerations: Wash face, hands and any exposed skin thoroughly after handling. Wash contaminated clothing before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state: Liquid

Appearance: Viscous

Odor: Low

Color: White

Odor threshold: Negligible odor.

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
pH	No applicable	
Melting point/ freezing point	None / 0 315°C None /32 °F	Melting Point is not applicable. Freezing points are shown.
Boiling point / boiling range	> 100 315°C / 212 °F	
Flash point	Not applicable 315°C / Not applicable °F	Non Flammable
Evaporation rate	The evaporation rate of the water component of this emulsion product is dependent upon: 1) The temperature of the water at the air-water surface; 2) The humidity of the air; 3) The area of the air-water surface; 4) The temperate of the air. For Industrial Use Only	No data available. Evaporation rate is dependent upon atmospheric conditions.
Flammability (solid, gas)	Non Flammable	

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
Flammability Limit in Air		Not flammable
Upper flammability limit:	Not applicable	
Lower flammability limit:	Not applicable	
Vapor pressure	2.33 (kPa)	@ 20 °C
Vapor density	5.3	Where: Air = 1 at 68 degrees F (20 degrees C)
Specific Gravity	1.34	Water = 1g/ml
Water solubility	Dispersible	
Solubility in other solvents	Soluble in aromatic and aliphatic solvents.	
Partition coefficient	For Industrial Use Only	No data available.
Autoignition temperature	330 315°C / 626 °F	
Decomposition temperature	For Industrial Use Only	
Kinematic viscosity	For Industrial Use Only	
Dynamic viscosity	For Industrial Use Only	
Explosive properties	Not an explosive	
Oxidizing properties	None	
<u>Other Information</u>		
Softening point	Not applicable	
Molecular weight	For Industrial Use Only	
VOC Content (%)	Less than 50 g/l	
Density	11.0 to 11.4 lb/gal	
Bulk density	Not applicable	

10. STABILITY AND REACTIVITY

Reactivity: Not applicable

Chemical stability: Stable

Possibility of Hazardous Reactions: None under normal use.

Hazardous polymerization: Hazardous polymerization does not occur.

Conditions to avoid: None known for product as a whole.

Incompatible materials: Strong acids. Strong oxidizing agents.

Hazardous Decomposition Products: Combustion may produce carbon monoxide, carbon dioxide, and other asphyxiants.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information: Toxicological testing has not been conducted for this product overall. Available toxicological data for individual ingredients are summarized below.

Inhalation: Avoid breathing vapors or mists.

Eye contact: Avoid contact with eyes. Contact with eyes may cause irritation.

Skin contact: May cause irritation.

Ingestion: If swallowed, do not induce vomiting. Get medical attention immediately. Not an expected route of exposure.

Component Information: The IARC Monograph (Vol 93, 2010, Carbon Black, Titanium Dioxide, Talc) states "No significant exposure to primary particles of Titanium Dioxide is thought to occur during the use of products in which Titanium Dioxide is bound to other materials, such as in paints."

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Water 7732-18-5	> 90 mL/kg (Rat)	-	-
Titanium Dioxide (Non-Carcinogenic) 13463-67-7	> 10000 mg/kg (Rat)	-	-
Ethylene glycol 107-21-1	= 4700 mg/kg (Rat)	= 10600 mg/kg (Rat) = 9530 µL/kg (Rabbit)	-

Information on toxicological effects

Symptoms: For Industrial Use Only.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation: Can cause skin irritation.

Serious eye damage/eye irritation: Irritating to eyes.

Irritation: Irritating to eyes and skin.

Corrosivity: Not classified.

Sensitization: May cause sensitization of susceptible persons.

Germ cell mutagenicity: Contains a known or suspected mutagen. None known for product as a whole.

Carcinogenicity: The table below indicates whether each agency (ACGIH, IARC, NTP, or OSHA) has listed any ingredient as a carcinogen.

TITANIUM DIOXIDE: Titanium dioxide has been classified by IARC as possible carcinogenic to humans (Group 2B) through inhalation. This classification is based on inadequate evidence for carcinogenicity in humans, but sufficient evidence of carcinogenicity in animals (rats). It should be noted that recent studies have demonstrated that the rat may be particularly sensitive to high levels of toxicity dusts such as titanium dioxide. Epidemiology studies do not suggest an increased risk of cancer in humans from occupational exposure to titanium dioxide. If the product is a coating or dispersion containing titanium dioxide where the titanium dioxide is bound in the product matrix, it is not likely to result in significant airborne exposure unless the product itself is sprayed or otherwise dispersed in air.

Chemical Name	ACGIH	IARC	NTP	OSHA
Titanium Dioxide (Non Carcinogenic) 13463-67-7	-	Group 2B	-	X

Legend

ACGIH (American Conference of Governmental Industrial Hygienists)

- A1** - Known Human Carcinogen
- A2** - Suspected Human Carcinogen
- A3** - Animal Carcinogen
- A4** - Not Classifiable as a Human Carcinogen

IARC (International Agency for Research on Cancer)

- Group 1** - Carcinogenic to Humans
- Group 2A** - Probably Carcinogenic to Humans
- Group 2B** - Possibly Carcinogenic to Humans
- Group 3** - Not classifiable as a human carcinogen.

NTP (National Toxicology Program)

- Known** - Known Carcinogen
- Reasonably Anticipated** - Reasonably Anticipated to be a Human Carcinogen

OSHA (Occupational Safety and Health Administration of the US Department of Labor)

- X** - Present

Reproductive toxicity: None known for product as a whole.

Developmental Toxicity: None known for product as a whole.

Teratogenicity: None known.

STOT - single exposure: For Industrial Use Only.

STOT - repeated exposure: For Industrial Use Only.

Aspiration hazard: For Industrial Use Only.

The following values are calculated based on chapter 3.1 of the GHS document

For exterior use only. Do not use indoors.

ATEmix (oral): 31,031.00

12. ECOLOGICAL INFORMATION

Ecotoxicity

The following table lists information related to aquatic toxicity

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Ethylene glycol 107-21-1	6500 - 13000: 96 h Pseudokirchneriella subcapitata mg/L EC50	41000: 96 h Oncorhynchus mykiss mg/L LC50 40761: 96 h Oncorhynchus mykiss mg/L LC50 static 27540: 96 h Lepomis macrochirus mg/L LC50 static 14 - 18: 96 h Oncorhynchus mykiss mL/L LC50 static 40000 - 60000: 96 h Pimephales promelas mg/L LC50 static 16000: 96 h Poecilia reticulata mg/ L LC50 static	46300: 48 h Daphnia magna mg/L EC50

Persistence and degradability

For Industrial Use Only.

Bioaccumulation

For Industrial Use Only.

Chemical Name	Partition coefficient
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Ethylene glycol 107-21-1	-1.93
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Other adverse effects

For Industrial Use Only

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes: Disposal should be in accordance with applicable local, regional, national and international laws and regulations.

Contaminated packaging: Do not reuse container.

14. TRANSPORT INFORMATION

Note: This material is not subject to regulation as a hazardous material for shipping

DOT: Not regulated.

TDG: Not regulated.

MEX: Not regulated.

ICAO (air): Not regulated.

IATA: Not regulated.

IMDG: Not regulated.

RID: Not applicable in the United States.

ADR: Not applicable in the United States.

ADN: Not applicable in the United States.

15. REGULATORY INFORMATION

International Inventories

TSCA: All of the components of this product are listed on the US TSCA (Toxic Substances Control Act) Inventory or are exempt.

DSL/NDSL: All of the components of this product are listed on the DSL.

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name

SARA 313 - Threshold Values %

Ethylene glycol - 107-21-1

1.0

SARA 311/312 Hazard Categories

Acute health hazard: No
 Chronic Health Hazard: No
 Fire hazard: No
 Sudden release of pressure hazard: No
 Reactive Hazard: No

CWA (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)

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).

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Ethylene glycol 107-21-1	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals

Chemical Name	California Proposition 65
Titanium Dioxide (Non-Carcinogenic) - 13463-67-7	Carcinogen
Ethylene glycol - 107-21-1	Developmental

U.S. State Right-to-Know Regulations

This product contains the following substances regulated by various State Right-to-Know regulations.

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Calcium Carbonate 1317-65-3	X	X	X
Water 7732- 18-5	-	-	X
Titanium Dioxide (Non Carcinogenic) 13463-67-7	X	X	X
Ethylene glycol 107-21-1	X	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number: Not applicable

16. OTHER INFORMATION

NFPA Rating: Health = 1 Fire = 0 Instability = 0
HMIS Rating: Health = 1 Fire = 0 Physical Hazard = 0

PREPARED BY: CASTAGRA PRODUCTS, INC.

DATE: November 1, 2022

MANUFACTURER DISCLAIMER: The information contained herein is based on data believed to be reliable by CASTAGRA PRODUCTS, INC. It is true and accurate to the best of our knowledge, but is not intended to be all inclusive. Users should consider this information as a supplement to other information gathered by them and must make their own determination of suitability and completeness to assure proper safe use and disposal of these materials.