

SAFETY DATA SHEET

This safety data sheet complies with the requirements of: 29CFR1910.1200

Issue Date 23-Jan-2018 Revision Date 21-May-2015 Version 1

Product identifier

Product Name Sunblock Elastomeric Roof Coating

Other means of identification

Product Code LUCAS 1010 Synonyms None

Recommended use of the chemical and restrictions on use

Recommended UseWhite Roof Coating. Reflective Roof Coating. **Uses advised against**For exterior use only. Do not use indoors.

Details of the supplier of the safety data sheet

Manufacturer Address R.M. Lucas Company

3211 South Wood Street Chicago, Illnois 60608 (773) 523-4300

Emergency telephone number

Emergency Telephone Call CHEMTREC Day or Night:

Within USA and Canada: 1-800 424-9300 Outside USA and Canada: 1-703-527-3887

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Carcinogenicity Category 2

Label elements

Emergency Overview

Warning

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 68% 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
Calcium Carbonate	1317-65-3	30 - 40%	*
Water	7732-18-5	30 - 40%	*
Acrylic Co-Polymer	25035-69-2	20 - 30%	*
Titanium Dioxide	13463-67-7	0 - 10%	*
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

No information available.

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.

Extremely slippery when spilled. Other Information

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.

Pick up the absorbed material (described just above) and transfer to properly labeled Methods for cleaning up

containers for disposal according to local / national regulations (see Section 13).

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

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.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Calcium Carbonate	-	TWA: 15 mg/m³ total dust	TWA: 10 mg/m ³ total dust
1317-65-3		TWA: 5 mg/m³ respirable fraction	TWA: 5 mg/m ³ respirable dust
		(vacated) TWA: 15 mg/m³ total dust	- '
		(vacated) TWA: 5 mg/m³ respirable	
		fraction	
Titanium Dioxide	TWA: 10 mg/m ³	TWA: 15 mg/m³ total dust	IDLH: 5000 mg/m ³
13463-67-7		(vacated) TWA: 10 mg/m³ total dust	
Ethylene glycol	STEL: 50 ppm vapor fraction	(vacated) Ceiling: 50 ppm	-
107-21-1	STEL: 10 mg/m ³ inhalable	(vacated) Ceiling: 125 mg/m ³	
	particulate matter, aerosol only		
	TWA: 25 ppm_vapor fraction		

Appropriate engineering controls

Engineering ControlsNone 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 protectionWear 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

Appearance Viscous Odor Low

ColorWhiteOdor thresholdNegligible odor.

<u>Property</u> <u>Values</u> <u>Remarks • Method</u>

pH No applicable

Melting point/freezing point None / 0 °C None / 32 °F Melting Point is not applicable. Freezing points are

shown.

Boiling point / boiling range > 100 °C / 212 °F

Flash point Not applicable °C / Not applicable °FNon Flammable

Evaporation rate The evaporation rate of the water No data available. Evaporation rate is dependent

component of this emulsion product is upon atmospheric conditions.

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

temperature of the air. No information

available

Flammability (solid, gas) Non Flammable

Flammability Limit in Air Not flammable

Upper flammability limit: Not applicable
Lower flammability limit: Not applicable
(appr. prossure 2, 23, (kPa))

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

Water solubility Dispersible Solubility in other solvents Soluble in aromatic and aliphatic

solvents.

Partition coefficientNo information availableNo data available

Autoignition temperature

Decomposition temperature

Kinematic viscosity

Dynamic viscosity

Explosive properties

330 °C / 626 °F

No information available

No information available

No information available

Not an explosive

Oxidizing properties None

Other Information

Softening point Not applicable

Molecular weight
VOC Content (%)

No information available
Less than 50 g/l

Density
11.0 to 11.4 lb/gal
Bulk density
Not applicable

10. STABILITY AND REACTIVITY

Reactivity

Not applicable 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 individualing redients 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

* No significant exposure to Crystalline Silica (Quartz) is thought to occur during the use of products in which Crystalline Silica (Quartz) is bound to other materials, such as in paints and coatings. As one reference, see California Office of Health Hazard Assessment at: http://www.oehha.org/prop65/CRNR_notices/safe_use/sylicasud2.html

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	> 90 mL/kg (Rat)	-	=	
7732-18-5				
Titanium Dioxide	> 10000 mg/kg (Rat)	-	=	
13463-67-7				
Ethylene glycol	= 4700 mg/kg (Rat)	= 10600 mg/kg (Rat) = 9530 μL/kg	-	
107-21-1		(Rabbit)		

Information on toxicological effects

Symptoms No information available.

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

This product does not contain any ingredients that cause germ cell mutagenicity.

Carcinogenicity The table below indicates whether each agency (ACGIH, IARC, NTP, or OSHA) has listed

any ingredient as a carcinogen.

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

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 Developmental ToxicityNone known for product as a whole.

None known for product as a whole.

Teratogenicity None known.

STOT - single exposure
STOT - repeated exposure
Aspiration hazard
No information available.
No information available.
No information available.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document For exterior use only. Do not use indoors.

ATEmix (oral) 15,203.00

12. ECOLOGICAL INFORMATION

Ecotoxicity

67 % of the mixture consists of components(s) of unknown hazards to the aquatic environment

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

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Chemical Name	Partition coefficient
Ethylene glycol	-1.93
107-21-1	

Other adverse effects No information available

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 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	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	5000 lb	-	RQ 5000 lb final RQ
107-21-1			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 - 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 13463-67-7	X	X	Х
Ethylene glycol 107-21-1	X	X	X

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

NFPA Health hazards 1 Flammability 1 Instability 0 Physical and Chemical

Properties -

HMIS Health hazards 1 Flammability 1 Physical hazards 0 Personal protection -

Prepared By Prepared by Robert Barry

 Issue Date
 23-Jan-2018

 Revision Date
 21-May-2015

Revision Note

Version #1 was not released for public distribution. Version #1 was a test/working document.

Disclaimer

The information provided in this Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.

End of Safety Data Sheet