SAFETY DATA SHEET

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

Issue Date 11-May-2015
Revision Date 21-May-2015
Version 1

Product identifier
Product Name White Elastomeric Roof Coating

Other means of identification
Product Code EL-1
Synonyms None

Recommended use of the chemical and restrictions on use
Recommended Use White 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 Seaboard Asphalt Products Company
3601 Fairfield Road
Baltimore, MD 21226

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 1A

Label elements

Emergency Overview

Danger

Hazard statements May cause 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

Hazard not otherwise classified (HNOC)
Not applicable

Other Information
Unknown acute toxicity
58.91568% 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.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS No.</th>
<th>Weight-%</th>
<th>Trade Secret</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>30 - 40%</td>
<td>*</td>
</tr>
<tr>
<td>Calcium Carbonate</td>
<td>1317-65-3</td>
<td>30 - 40%</td>
<td>*</td>
</tr>
<tr>
<td>Acrylic Co-Polymer</td>
<td>25035-69-2</td>
<td>20 - 30%</td>
<td>*</td>
</tr>
<tr>
<td>Titanium Dioxide</td>
<td>13463-67-7</td>
<td>0 - 10%</td>
<td>*</td>
</tr>
<tr>
<td>Ethylene glycol</td>
<td>107-21-1</td>
<td>0 - 10%</td>
<td>*</td>
</tr>
<tr>
<td>Quartz</td>
<td>14808-60-7</td>
<td>0 - 10%</td>
<td>*</td>
</tr>
</tbody>
</table>

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.

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/PERSOAL 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.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH TLV</th>
<th>OSHA PEL</th>
<th>NIOSH IDLH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium Carbonate</td>
<td></td>
<td>TWA: 15 mg/m³ total dust TWA: 5 mg/m³ respirable fraction (vacated) TWA: 15 mg/m³ total dust (vacated) TWA: 5 mg/m³ respirable fraction</td>
<td>TWA: 10 mg/m³ total dust TWA: 5 mg/m³ respirable dust</td>
</tr>
<tr>
<td>1317-65-3</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Titanium Dioxide</td>
<td>TWA: 10 mg/m³</td>
<td>TWA: 15 mg/m³ total dust (vacated) TWA: 10 mg/m³ total dust</td>
<td>IDLH: 5000 mg/m³</td>
</tr>
<tr>
<td>13483-67-7</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ethylene glycol</td>
<td>Ceiling: 100 mg/m³ aerosol only (vacated) Ceiling: 50 ppm (vacated) Ceiling: 125 mg/m³</td>
<td></td>
<td></td>
</tr>
<tr>
<td>107-21-1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quartz</td>
<td>TWA: 0.025 mg/m³ respirable fraction (vacated) TWA: 0.1 mg/m³ respirable dust (30)/(%SI02 + 2) mg/m³ TWA total dust (250)/(%SI02 + 5) mg/m³ TWA respirable fraction (10)/(%SI02 + 2) mg/m³ TWA respirable fraction</td>
<td>IDLH: 50 mg/m³ respirable dust TWA: 0.05 mg/m³ respirable dust</td>
<td></td>
</tr>
<tr>
<td>14808-60-7</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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
Color
White
Odor
Low
Odor threshold
Negligible odor.

Property
pH
Melting point/freezing point
None / 0 °C None / 32 °F
Boiling point / boiling range
> 100 °C / 212 °F
Flash point
Not applicable °C / Not applicable °F
Evaporation rate
The evaporation rate of the water component of this emulsion product is dependent upon: 1) The temperature

Remarks • Method
Melting Point is not applicable. Freezing points are shown.
Non Flammable
No data available. Evaporation rate is dependent upon atmospheric conditions.
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)
Flammability Limit in Air
   Upper flammability limit: Not applicable
   Lower flammability limit: Not applicable
Vapor pressure 2.33 (kPa)
Vapor density 5.3
Specific Gravity 1.34
Water solubility Dispersible
Solubility in other solvents Soluble in aromatic and aliphatic solvents.
Partition coefficient No information available
Autoignition temperature 330 °C / 626 °F
Decomposition temperature No information available
Kinematic viscosity No information available
Dynamic viscosity No information available
Explosive properties Not an explosive
Oxidizing properties None

Other Information
Softening point Not applicable
Molecular weight No information available
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.
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 Toxocological testing has not been conducted for this product overall. Available toxocological 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
* 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.osha.ca.gov/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."

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalation LD50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titanium Dioxide</td>
<td>13463-67-7</td>
<td>&gt; 10000 mg/kg (Rat)</td>
<td>-</td>
</tr>
<tr>
<td>Ethylene glycol</td>
<td>107-21-1</td>
<td>= 4000 mg/kg (Rat)</td>
<td>-</td>
</tr>
<tr>
<td>Quartz</td>
<td>14808-60-7</td>
<td>= 500 mg/kg (Rat)</td>
<td>-</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>IARC</th>
<th>NTP</th>
<th>OSHA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quartz</td>
<td>A2</td>
<td>Group 1</td>
<td>Known</td>
<td>X</td>
</tr>
<tr>
<td>14808-60-7</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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.

Developmental Toxicity
None known.

Teratogenicity
None known.

STOT - single exposure
No information available.

STOT - repeated exposure
No information available.

Aspiration hazard
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) 16,437.00
12. ECOLOGICAL INFORMATION

Ecotoxicity

64.17% of the mixture consists of components(s) of unknown hazards to the aquatic environment

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Algae/aquatic plants</th>
<th>Fish</th>
<th>Crustacea</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene glycol</td>
<td>6500 - 13000: 96 h</td>
<td>41000: 96 h Oncorhynchus mykiss mg/L LC50 14 - 18: 96 h Oncorhynchus mykiss mL/L LC50 static 27540: 96 h Lepomis macrochirus mg/L LC50 static 40781: 96 h 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</td>
<td>46300: 48 h Daphnia magna mg/L EC50</td>
</tr>
<tr>
<td>107-21-1</td>
<td>Pseudokirchneriella subcapitata mg/L EC50</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Persistence and degradability
No information available.

Bioaccumulation
No information available.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Partition coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene glycol</td>
<td>-1.93</td>
</tr>
<tr>
<td>107-21-1</td>
<td></td>
</tr>
</tbody>
</table>

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.
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

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>SARA 313 - Threshold Values %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene glycol - 107-21-1</td>
<td>1.0</td>
</tr>
</tbody>
</table>

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).

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Hazardous Substances RQs</th>
<th>CERCLA/SARA RQ</th>
<th>Reportable Quantity (RQ)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene glycol 107-21-1</td>
<td>5000 lb</td>
<td>-</td>
<td>RQ 5000 lb final RQ RQ 2270 kg final RQ</td>
</tr>
</tbody>
</table>

US State Regulations

California Proposition 65
This product contains the following Proposition 65 chemicals

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>California Proposition 65</th>
</tr>
</thead>
<tbody>
<tr>
<td>Titanium Dioxide - 13463-67-7</td>
<td>Carcinogen</td>
</tr>
<tr>
<td>Quartz - 14805-60-7</td>
<td>Carcinogen</td>
</tr>
</tbody>
</table>

U.S. State Right-to-Know Regulations

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

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>New Jersey</th>
<th>Massachusetts</th>
<th>Pennsylvania</th>
</tr>
</thead>
<tbody>
<tr>
<td>Calcium Carbonate 1317-65-3</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Titanium Dioxide 13463-67-7</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Ethylene glycol 107-21-1</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Quartz</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
</tbody>
</table>
16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION

<table>
<thead>
<tr>
<th>NFPA</th>
<th>Health hazards</th>
<th>Flammability</th>
<th>Instability</th>
<th>Physical and Chemical Properties</th>
<th>Personal protection</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>0</td>
<td>0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

HMIS

<table>
<thead>
<tr>
<th>Prepared By</th>
<th>Prepared by Robert Barry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Issue Date</td>
<td>11-May-2015</td>
</tr>
<tr>
<td>Revision Date</td>
<td>21-May-2015</td>
</tr>
</tbody>
</table>

No information available

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