

SECTION 1: PRODUCT NAME AND COMPANY IDENTIFICATION

Product Name: Rooflex Aluminum Roof Coating

Recommended Use: Roofing and other construction applications.

Restriction on Use: None

Manufacturer:

Polyglass U.S.A. Inc.
 1111 West Newport Center Drive
 Deerfield Beach, Florida 33442
 866-222-9782

SDS Date of Preparation: 06/3/14

Emergency Contact: (800) 424-9300 CHEMTREC (USA)

SECTION 2: HAZARDS IDENTIFICATION

Hazard Classification:

Physical	Health
Flammable Liquid Category 3	Skin Irritation Category 2 Specific Target Organ Toxicity Single Exposure Category 3 (narcotic effects) Specific Target Organ Toxicity Repeated Exposure Category 1 (nervous system)

Label Elements:

DANGER!
 Flammable liquid and vapor.
 Causes skin irritation.
 May cause drowsiness or dizziness.
 Causes damage to nervous system through prolonged or repeated exposure.



Prevention

Keep away from flames and hot surfaces. - No smoking. Keep container tightly closed. Use explosion-proof electrical equipment. Ground and bond containers and receiving equipment. Use explosion-proof electrical equipment. Use only non-sparking tools. Take precautionary measures against static discharge.
 Do not breathe vapors. Use only outdoors or in a well-ventilated area.
 Wash thoroughly after handling. Do not eat, drink or smoke when using this product.
 Wear protective gloves and eye protection.

Response

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water, then wash with plenty of soap and water. If skin irritation or rash occurs: Get medical attention. Wash contaminated clothing before reuse.
 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a poison center or doctor if you feel unwell.
 In case of fire: Use water fog, carbon dioxide, dry chemical or foam to extinguish.

Storage

Store in a well-ventilated place. Keep container tightly closed. Store locked up. Keep cool.

Disposal:

Dispose of contents and container in accordance with local and national regulations.



Safety Data Sheet

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENTS	CAS#.	WT.%
Mineral Spirits	8052-41-3 64742-82-1	30-60
Asphalt	64742-93-4	15-50
Perlite	93763-70-3	1-10
Aromatic Petroleum Distillates	64742-95-6	1-5
1,2 4 Trimethylbenzene	95-63-6	1-3
Aluminum	7429-90-5	15-20

Note: The crystalline silica in this product is inextricably bound so no exposure will occur and the carcinogen classification does not apply.

The exact percentage (concentration) of composition has been withheld as a trade secret.

SECTION 4 FIRST AID MEASURERS

Eyes: Immediately flush eyes with water for at least 15 minutes while lifting the upper and lower lids. Get medical attention if irritation persists.

Skin: Remove contaminated clothing. Wash skin thoroughly with soap and water. If rash or irritation develops, get medical attention. Launder clothing before re-use. (Discard contaminated shoes).

Inhalation: Remove victim to fresh air. If breathing has stopped give artificial respiration. If breathing is difficult have qualified personnel administer oxygen. Get immediate medical attention.

Ingestion: If conscious, rinse mouth with water. Do not induce vomiting. Never give anything by mouth to a person who is unconscious or convulsing. Get immediate medical attention.

Most important symptoms/effects, acute and delayed: Causes skin irritation. Vapors and mists may cause mucous membrane and upper respiratory tract irritation with headache, dizziness, drowsiness, nausea and unconsciousness. Prolonged and/or repeated overexposure may cause liver, kidney, and nervous system damage.

Indication of immediate medical attention and special treatment, if necessary: Immediate medical attention if needed for severe inhalation exposures and all ingestions.

SECTION 5 FIRE FIGHTING MEASURES

Extinguishing Media: Use water fog, carbon dioxide, dry chemical or foam. Cool fire exposed containers with water

Special Protective Equipment and Precautions for Fire-fighters: Firefighters should wear full emergency equipment and NIOSH approved positive pressure self-contained breathing apparatus. Do not allow run-off from firefighting to enter drains or water courses

Specific Hazards Arising from the Chemical: Flammable liquid and vapor. Vapors are heavier than air and will travel along surfaces to remote ignition sources and flash back. Closed containers may explode if exposed to extreme heat. Combustion products may include oxides of carbon and sulfur, hydrogen sulfide, sulfur dioxide and hydrocarbons.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures: Wear appropriate protective clothing to prevent eye and skin contact. Evacuate and ventilate area using explosion proof equipment. Remove all ignition sources such as flames, hot surfaces, and pilot lights and spark producing equipment.

Environmental precautions: Avoid release to the environment. Report releases as required by local, state and federal authorities.

Methods and Materials for Containment and Cleaning Up: Collect spilled material with inert material and place into a closable container for disposal.

SECTION 7 HANDLING and STORAGE

Precautions for Safe Handling: Avoid contact with the eyes, skin and clothing. Avoid breathing vapors. Wear protective clothing and equipment as described in Section 8. Use only with adequate ventilation. Wash thoroughly with soap and water after handling. Keep containers closed when not in use. Keep product away from heat, sparks, flames and all other sources of ignition. Do not permit smoking in use or storage areas.

Do not cut, drill, grind or weld on or near containers, even empty containers. Empty containers retain product residues can be hazardous. Follow all MSDS precautions when handling empty containers.

Conditions for Safe Storage, Including any Incompatibilities: Store in a dry, well-ventilated area away from heat, direct sunlight and all sources of ignition and oxidizing agents.

SECTION 8 EXPOSURE CONTROLS and PERSONAL PROTECTION

Exposure Guidelines:

INGREDIENTS	EXPOSURE LIMITS
Asphalt	0.5 mg/m ³ TWA ACGIH TLV (as asphalt fume)
Mineral Spirits	100 ppm TWA ACGIH TLV 500 ppm TWA OSHA PEL
Perlite	5 mg/m ³ TWA OSHA PEL (respirable dust) 15 mg/m ³ TWA OSHA PEL (total dust)
Aromatic Petroleum Distillates	None established
1,2,4 Trimethylbenzene (as trimethylbenzenes)	25 ppm TWA ACGIH TLV
Aluminum	5 mg/m ³ TWA OSHA PEL (respirable dust) 15 mg/m ³ TWA OSHA PEL (total dust) 1 mg/m ³ TWA ACGIH TLV (respirable dust)

Appropriate Engineering Controls: Use with adequate ventilation to maintain exposures below the occupational exposure limits. Use explosion proof equipment.

Respiratory Protection: If the exposure limits are exceeded a NIOSH approved respirator appropriate for the form and concentration of the contaminants should be used. Selection and use of respiratory equipment must be in accordance with OSHA 1910.134 and good industrial hygiene practice.

Gloves: Nitrile or other impervious gloves are recommended to prevent skin contact.

Eye Protection: Chemical safety goggles should be worn if splashing is possible.

Other Protective Equipment: Impervious clothing as needed to prevent contact. For operations where contact can occur, washing facilities should be available.

SECTION 9 PHYSICAL and CHEMICAL PROPERTIES

Appearance And Odor: Black liquid with silver pigments, petroleum solvent odor

Boiling Point (@ 760 mmHg): 310-400°F (154-204°C)	Freezing Point: Not available
Odor Threshold: Not available	Viscosity: <500 cP @ 25°C
Relative density (H2O=1): 0.98	Vapor Pressure: 2 mmHg @ 68°F
VOC: 500 g/L (4.2 lbs/gal)	Vapor Density (AIR=1): >1
Evaporation Rate: Not available	Solubility In Water: Insoluble in water
pH: Not applicable	Partition Coefficient n-Octanol/Water: Not determined
Flash Point: 105°F (40.5°C)	Autoignition Temperature: Not available
Decomposition Temperature: Not available	Flammability (solid, gas): Not applicable
Flammable Limits: (vol % in air)	LEL – 1.1%(mineral spirits) UEL – 7.0% (aromatic petroleum distillates)

SECTION 10 STABILITY and REACTIVITY

Reactivity: Not normally reactive.

Chemical Stability: Stable under normal storage and handling conditions

Possibility of Hazardous Reactions: None known

Conditions to avoid: Avoid heat, sparks, flames and all other sources of ignition.

Incompatible materials: Avoid oxidizing agents and water.

Hazardous decomposition products: Thermal decomposition may yield oxides of carbon and sulfur, hydrogen sulfide, sulfur dioxide and hydrocarbons.

SECTION 11 TOXICOLOGICAL INFORMATION

Eye: Contact may cause irritation with redness and tearing.

Skin: Contact may cause irritation, drying and dermatitis.

Inhalation: Inhalation of vapors may cause mucous membrane and respiratory irritation and central nervous system depression with symptoms of headache, dizziness, nausea, vomiting, disorientation, stupor and unconscious. Severe overexposures may cause respiration depression and death. Hydrogen sulfide will evolve from asphalt and collect in the headspace of containers. Hydrogen sulfide is irritating to the eyes and respiratory tract at low concentrations. High concentrations of hydrogen sulfide can cause respiratory arrest and death.

Ingestion: Ingestion may cause mucous membrane and gastrointestinal irritation and nervous system depression with symptoms of headache, dizziness, nausea, narcosis and unconsciousness.

Sensitization: This product is not expected to cause sensitization.

Chronic Effects: Prolonged overexposure may cause damage to the nervous system, blood system, liver and kidneys. Repeated inhalation of large amounts of silica dust over an extended period of time may result in a progressive, disabling disease, silicosis. However, the crystalline silica in this product is bound in the asphalt matrix and dust exposure would not be expected.

Carcinogenicity: This product contains a very small amount of naturally occurring crystalline silica. Respirable crystalline silica is classified as a Group 1 carcinogen by IARC, and "Known to be a Human Carcinogen" by NTP. However, the crystalline silica in this product is bound in the asphalt matrix and dust exposure would not be expected. None of the other components present at 0.1% or greater are listed as a carcinogen by NTP, IARC, ACGIH or OSHA.

Numerical Measures of Toxicity:

Asphalt: Oral Rat LD50 - >5.0 g/kg; Skin Rabbit LD50 - > 2.0 g/kg

Mineral Spirits: Oral rat LD50 >5000mg/kg dermal LD50 rabbit >2000 mg/kg, inhalation rat LC50 >7.63 mg/L (no mortality)

Aromatic Petroleum Distillates: Oral rat LD50 >2000 - <5000 mg/kg; Dermal LD50 rabbit >2000 mg/kg

Perlite: No toxicity data available

1,2,4 Trimethylbenzene: Oral rat LD50 3280 mg/kg; Skin rabbit >3160 mg/kg



Safety Data Sheet

Aluminum: No toxicity data available

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity:

Mineral Spirits: The 96-h LC₅₀ values for fish (Pimephales promelas) was within the range of 4.2-20.8 and fish (Lepomis macrochirus) was within the range of 2.1-4.2 mg/liter

The 48-h LC₅₀ for Daphnia magna was within the range of 0.42-2.3 mg/liter

Asphalt: Toxicity in fish, daphnia and algae is estimated >1000 mg/L

Aromatic Petroleum Distillates: L(E)C50 (fish, invertebrates and algae 1-10 mg/L

Persistence and degradability: Mineral Spirits is readily biodegradable. Asphalt is not biodegradable. Aromatic Petroleum Distillates is expected to be readily biodegradable.

Bioaccumulative potential: Based on the calculated log Kow >3, Mineral Spirits has some potential to bioaccumulate.

Aromatic Petroleum Distillates does not have the potential for significant bioaccumulation.

Mobility in soil: Other adverse effects: No data available.

Other adverse effects: No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Method: Dispose in accordance with all local, state and federal regulations.

SECTION 14: TRANSPORT INFORMATION

If shipped in containers 119 gallons (889 lbs.) or less: Not regulated under US DOT or Canadian TDG

If Shipped in containers greater than 119 gallons (889 lbs.) in US: NA1993, Combustible Liquid, n.o.s. (petroleum distillates), III

If Shipped in containers greater than 119 gallons (889 lbs.) in Canada: UN1999, Tars, Liquid, 3 III

If Shipped Bulk at Elevated Temperature (above the flashpoint of 105°F (40.5°C): UN3256, Elevated Temperature Liquid, Flammable, n.o.s. (Petroleum Distillates), 3 III

Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code): Not applicable – product is transported only in packaged form.

Special precautions: None known

SECTION 15: REGULATORY INFORMATION

SARA Hazard Category (311/312): Acute Health, Chronic Health, Fire Hazard.

EPA SARA 313: This product contains the following chemicals regulated under SARA Title III, section 313:

1,2,4 Trimethylbenzene	95-63-6 1-3%
------------------------	--------------

CERCLA Hazardous Substances (Section 103)/RQ: This product is not subject to CERCLA reporting requirements, however, oil spills are reported to the National Response Center under the Clean Water Act and many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

Toxic Substances Control Act: All of the components of this product are listed on the TSCA inventory.

California Proposition 65: This product contains chemicals known to the State of California to cause cancer or reproductive toxicity.

WHMIS Classification: Class B Division 3 (Combustible Liquid); Class D Division 2 Subdivision B (Toxic Material Causing other Toxic Effects)



Safety Data Sheet

This MSDS has been prepared according to the criteria of the Controlled Products Regulation (CPR) and the MSDS contains all of the information required by the CPR.

SECTION 16: OTHER INFORMATION

NFPA Rating:	Health = 2	Fire = 2	Instability = 0
HMIS Rating:	Health = 2	Fire = 2	Physical Hazard = 0

SDS Date of Preparation: 06/03/14

Revision Summary: Change in format and content – Hazcom 2012, Changes to all Sections.

NOTICE

This above information is believed to be correct but does not propose to be all inclusive and shall be used only as a guide. Polyglass U.S.A. Inc. shall not be held liable for any damage resulting from handling or from contact with the above product. This information relates only to the product designated herein and does not relate to its use in combination with any other material or process.