

SAFETY DATA SHEET

1. Identification

Material name: Solargard® Acrythane
Material: 1410700005P

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
Beachwood OH 44122
US

Contact person: EH&S Department
Telephone: 216-292-5000
Emergency telephone number: 1-800-424-9300 (US); 1-613-996-6666 (Canada)

2. Hazard(s) identification

Hazard Classification

Health Hazards

Carcinogenicity Category 2

Unknown toxicity - Health

| | |
|--|-------|
| Acute toxicity, oral | 43 % |
| Acute toxicity, dermal | 63 % |
| Acute toxicity, inhalation, vapor | 100 % |
| Acute toxicity, inhalation, dust or mist | 100 % |

Unknown toxicity - Environment

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| Acute hazards to the aquatic environment | 80 % |
| Chronic hazards to the aquatic environment | 100 % |

Label Elements

Hazard Symbol:



Signal Word: Warning
Hazard Statement: Suspected of causing 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 (%)* |
|-------------------|------------|-------------------------|
| Titanium dioxide | 13463-67-7 | 15 - 40% |
| Zinc oxide | 1314-13-2 | 5 - 10% |
| Aluminum oxide | 1344-28-1 | 5 - 10% |
| Amorphous silica | 7631-86-9 | 5 - 10% |

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

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 symptoms/effects, acute and delayed

Symptoms: May cause skin and eye irritation.

Indication of immediate medical attention and special treatment needed

Treatment: Symptoms may be delayed.

5. Fire-fighting measures

General Fire Hazards: No unusual fire or explosion hazards noted.

Suitable (and unsuitable) extinguishing media

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| 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 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

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| 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

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| 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. |

8. Exposure controls/personal protection

Control Parameters
Occupational Exposure Limits

| Chemical Identity | type | Exposure Limit Values | Source |
|---------------------------------------|------|--|---|
| Titanium dioxide | TWA | 10 mg/m ³ | US. ACGIH Threshold Limit Values (2011) |
| Titanium dioxide - Total dust. | PEL | 15 mg/m ³ | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) |
| Zinc oxide - Respirable fraction. | TWA | 2 mg/m ³ | US. ACGIH Threshold Limit Values (2011) |
| | STEL | 10 mg/m ³ | US. ACGIH Threshold Limit Values (2011) |
| Zinc oxide - Fume. | PEL | 5 mg/m ³ | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) |
| Zinc oxide - Total dust. | PEL | 15 mg/m ³ | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) |
| Zinc oxide - Respirable fraction. | PEL | 5 mg/m ³ | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) |
| Aluminum oxide - Respirable fraction. | TWA | 1 mg/m ³ | US. ACGIH Threshold Limit Values (2011) |
| | PEL | 5 mg/m ³ | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) |
| Aluminum oxide - Total dust. | PEL | 15 mg/m ³ | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) |
| Amorphous silica | TWA | 20 millions of particles per cubic foot of air | US. OSHA Table Z-3 (29 CFR 1910.1000) (2000) |
| | TWA | 0.8 mg/m ³ | US. OSHA Table Z-3 (29 CFR 1910.1000) (2000) |

| Chemical name | type | Exposure Limit Values | Source |
|---|-------|-----------------------|---|
| Titanium dioxide - Total dust. | TWA | 10 mg/m ³ | 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/m ³ | 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/m ³ | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |
| Titanium dioxide - Total dust. | TWA | 10 mg/m ³ | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008) |
| Zinc oxide - Respirable. | TWA | 2 mg/m ³ | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| | STEL | 10 mg/m ³ | 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/m ³ | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |
| | STEL | 10 mg/m ³ | 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) |
| Aluminum oxide - Respirable. | TWA | 1 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Aluminum oxide - Respirable fraction. | TWAEV | 1 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |
| Aluminum oxide - Total dust. - as Al | TWA | 10 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008) |
| Amorphous silica - Total | TWA | 4 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Amorphous silica - Respirable. | TWA | 1.5 mg/m3 | Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended) (07 2007) |
| Amorphous silica | TWAEV | 10 mg/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |
| Amorphous silica - Respirable dust. | TWA | 6 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.

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| 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

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| Physical state: | liquid |
| Form: | liquid |
| Color: | White |
| Odor: | Mild |
| Odor threshold: | No data available. |
| pH: | No data available. |
| 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 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: | 1.5 1.206 |
| 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

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| Reactivity: | No data available. |
| Chemical Stability: | Material is stable under normal conditions. |
| Possibility of hazardous reactions: | No data available. |

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| 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**

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|----------------------|---|
| 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 (list all possible routes of exposure)**

| | |
|--------------------------------|--|
| Oral | |
| Product: | No data available. |
| Dermal | |
| Product: | ATEmix: 6,065.57 mg/kg |
| Inhalation | |
| Product: | No data available. |
| Specified substance(s): | |
| Titanium dioxide | LC 50 (Rat, 4 h): 3.43 mg/l |
| Zinc oxide | LC 50 (Rat): > 5,700 mg/m ³ |
| Aluminum oxide | LC 50 (Rat, 4 h): > 2.3 mg/l |
| Amorphous silica | LC 50 (Rat, 4 h): > 2.08 mg/l |

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|-------------------------------|--------------------|
| Repeated dose toxicity | |
| Product: | No data available. |

| | |
|----------------------------------|--------------------|
| Skin Corrosion/Irritation | |
| Product: | No data available. |

Specified substance(s):

Titanium dioxide in vivo (Rabbit): Experimental result, Supporting study

Serious Eye Damage/Eye Irritation**Product:** No data available.**Specified substance(s):**

Titanium dioxide in vivo (Rabbit, 24 hrs): Not irritating

Zinc oxide in vivo (Rabbit, 24 - 72 hrs): Not irritating

Aluminum oxide in vivo (Rabbit, 24 hrs): Not irritating

Amorphous silica in vivo (Rabbit, 24 hrs): Not irritating

Respiratory or Skin Sensitization**Product:** No data available.**Carcinogenicity****Product:** Suspected of causing cancer.**IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:**

Titanium dioxide Overall evaluation: Possibly carcinogenic to humans.

US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogenic components identified

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):

No carcinogenic components 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 Toxicity - Single Exposure****Product:** No data available.**Specific Target Organ Toxicity - 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):

Zinc oxide LC 50 (Fathead minnow (*Pimephales promelas*), 96 h): 2,246 mg/l Mortality

Aquatic Invertebrates

Product: No data available.

Specified substance(s):

Zinc oxide LC 50 (Water flea (*Daphnia magna*), 48 h): 24.6 mg/l Mortality

Chronic hazards to the aquatic environment:

Fish

Product: No data available.

Specified substance(s):

Titanium dioxide ED 0 (*Phoxinus phoxinus*, 30 d): $\geq 1,000$ mg/l Experimental result, Supporting study
LC 10 (*Oncorhynchus mykiss*, 28 d): 0.981 mg/l Read-across from supporting substance (structural analogue or surrogate), Supporting study
LC 50 (*Oncorhynchus mykiss*, 28 d): 7.31 mg/l Read-across from supporting substance (structural analogue or surrogate), Supporting study
LC 1 (*Oncorhynchus mykiss*, 28 d): 0.191 mg/l Read-across from supporting substance (structural analogue or surrogate), Supporting study
LC 0 (*Coregonus autumnalis migratorius* G., 30 d): 3 mg/l Experimental result, Supporting study

Zinc oxide NOAEL (*Oncorhynchus mykiss*, 30 d): 974 μ g/l interpreted

Aluminum oxide NOAEL (*Pimephales promelas*, 28 d): 4.7 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 (BCF)
Product: No data available.

Partition Coefficient n-octanol / water (log Kow)
Product: No data available.

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)

None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

Chemical Identity **Reportable quantity**

Superfund Amendments and Reauthorization Act of 1986 (SARA)**Hazard categories**

Delayed (Chronic) Health Hazard

SARA 302 Extremely Hazardous Substance

None present or none present in regulated quantities.

SARA 304 Emergency Release Notification

Chemical Identity **Reportable quantity**

Zinc oxide

SARA 311/312 Hazardous Chemical

Chemical Identity **Threshold Planning Quantity**

Titanium dioxide 500 lbs

Zinc oxide 500 lbs

Aluminum oxide 500 lbs

Amorphous silica 500 lbs

SARA 313 (TRI Reporting)

Chemical Identity

Zinc oxide

Aluminum 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):

None present or none present in regulated quantities.

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

Titanium dioxide

Zinc oxide

Aluminum oxide

Amorphous silica

US. Massachusetts RTK - Substance List

Chemical Identity

Titanium dioxide
Zinc oxide
Aluminum oxide
Amorphous silica

US. Pennsylvania RTK - Hazardous Substances

Chemical Identity

Titanium dioxide
Zinc oxide
Aluminum oxide
Amorphous silica

US. Rhode Island RTK

Chemical Identity

Zinc oxide
Aluminum oxide

Other Regulations:

| | |
|--|--------|
| Regulatory VOC (less water and exempt solvent): | 12 g/l |
| VOC Method 310: | 1.00 % |

Inventory Status:

| | |
|--|--|
| Australia AICS: | One or more components in this product are not listed on or exempt from the Inventory. |
| Canada DSL Inventory List: | All components in this product are listed on or exempt from the Inventory. |
| EINECS, ELINCS or NLP: | One or more components in this product are not listed on or exempt from the Inventory. |
| Japan (ENCS) List: | One or more components in this product are not listed on or exempt from the Inventory. |
| China Inv. Existing Chemical Substances: | One or more components in this product are not listed on or exempt from the Inventory. |
| Korea Existing Chemicals Inv. (KECI): | One or more components in this product are not listed on or exempt from the Inventory. |
| Canada NDSL Inventory: | One or more components in this product are not listed on or exempt from the Inventory. |
| Philippines PICCS: | One or more components in this product are not listed on or exempt from the Inventory. |
| US TSCA Inventory: | All components in this product are 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.

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| 16. Other information, including date of preparation or last revision |
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Revision Date: 01/15/2016

Version #: 2.0

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.