

SAFETY DATA SHEET

1. Identification

Material name: TPA 60 MIL FIELD SHEET 78" X 90' TAN Material: 505360T503

Recommended use and restriction on use

Recommended use: Article Restrictions on use: Not known.

Manufacturer/Importer/Supplier/Distributor Information

Tremco U.S. Roofing 3735 Green Road Beachwood OH 44122 US

Contact person: Telephone: Emergency telephone number:

EH&S Department 216-292-5000 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 | 0.05 % | |
| Acute toxicity, dermal | 6.05 % | |
| Acute toxicity, inhalation, vapor | 100 % | |
| Acute toxicity, inhalation, dust or mist | 100 % | |
| Unknown toxicity - Environment | | |
| Acute hazards to the aquatic | 94 % | |
| environment | 100.01 | |
| Chronic hazards to the aquatic | 100 % | |

Label Elements

Hazard Symbol:

environment



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 | 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/effec | ts, 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 | | |
| Suitable extinguishing media: | Use fire-extinguishing media appropriate for surrounding materials. | |
| Unsuitable extinguishing | Do not use water jet as an extinguisher, as this will spread the fire. | |

media:



| Specific hazards arising from the chemical: | During fire, gases hazardous to health may be formed. |
|--|---|
| Special protective equipment an | d 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 | 6 |
| Personal precautions, protective equipment and emergency procedures: | No data available. |
| Methods and material for containment and cleaning up: | 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 | |
| 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. Ventilate well, avoid breathing vapors. Use approved respirator if air contamination is above accepted level. Use mechanical ventilation in case of handling which causes formation of dust. |
| 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/m3 | US. ACGIH Threshold Limit Values (2011) |
| Titanium dioxide - Total dust. | PEL | 15 mg/m3 | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) |



| Chemical name | type | Exposure Limit Values | Source |
|--|-------|-----------------------|---|
| Titanium dioxide - Total dust. | TWA | 10 mg/m3 | 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/m3 | 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/m3 | Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents) (11 2010) |
| Titanium dioxide - Total dust. | TWA | 10 mg/m3 | Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment) (12 2008) |

Appropriate Engineering Controls

Mechanical ventilation or local exhaust ventilation may be required. Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of dust.

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. |
| 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

| Physical state: | solid |
|--|--------------------|
| Form: | solid |
| Color: | Gray |
| Odor: | Slight |
| 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: | No data available. |
|--|--------------------|
| 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: | No data available. |
| Relative density: | 1.38 |
| Solubility(ies) | |
| Solubility in water: | Insoluble in water |
| 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

| Reactivity: | No data available. |
|--|---|
| Chemical Stability: | Material is stable under normal conditions. |
| Possibility of Hazardous Reactions: | No data available. |
| Conditions to Avoid: | Avoid heat or contamination. |
| Incompatible Materials: | No data available. |
| 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 exp 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: | No data available. | |
| Inhalation Product: | No data available. | |
| Specified substance(s): Titanium dioxide | LC 50 (Rat, 4 h): > 6.82 mg/l | |
| Repeated dose toxicity Product: | No data available. | |
| Skin Corrosion/Irritation Product: | No data available. | |
| Serious Eye Damage/Eye Irritatio Product: | on No data available. | |
| Specified substance(s): Titanium dioxide | in vivo (Rabbit, 24 - 72 hrs): Not irritating | |
| Respiratory or Skin Sensitizatior 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 - Product: | - Single Exposure No data available. |
| Specific Target Organ Toxicity - Product: | • • |
| | No data available. |
| Aspiration Hazard Product: | No data available. No data available. |

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

| Fish Product: | No data available. |
|--|--|
| Specified substance(s): Titanium dioxide | LC 50 (Mummichog (Fundulus heteroclitus), 96 h): > 1,000 mg/l Mortality |
| Aquatic Invertebrates Product: | No data available. |
| Specified substance(s): Titanium dioxide | EC 50 (Water flea (Daphnia magna), 48 h): > 1,000 mg/l Intoxication |
| Chronic hazards to the aquatic environment: | |
| Fish Product: | No data available. |
| Specified substance(s): Titanium dioxide | LC 0 (Coregonus autumnalis migratorius G., 30 d): 3 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-octand Product: | ol / water (log Kow) 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):

None present or none present in regulated quantities.

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 None present or none present in regulated quantities.

SARA 311/312 Hazardous Chemical

Chemical Identity
Titanium dioxideThreshold Planning Quantity
500 lbs

SARA 313 (TRI Reporting) None present or none present in regulated quantities.

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

US. Massachusetts RTK - Substance List

Chemical Identity Titanium dioxide

US. Pennsylvania RTK - Hazardous Substances

Chemical Identity Titanium dioxide



US. Rhode Island RTK

No ingredient regulated by RI Right-to-Know Law present.

Other Regulations: **Regulatory VOC (less water** 0 g/l and exempt solvent): VOC Method 310: 0.00 % **Inventory Status:** Australia AICS: One or more components in this product are not listed on or exempt from the Inventory. All components in this product are listed on or Canada DSL Inventory List: 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. One or more components in this product are US TSCA Inventory: not 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. One or more components in this product are Japan ISHL Listing: not listed on or exempt from the Inventory. One or more components in this product are Japan Pharmacopoeia Listing: not listed on or exempt from the Inventory.

16.Other information, including date of preparation or last revision

Revision Date: 07/2

07/28/2015



| Version #: | 1.0 |
|----------------------|--|
| 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. |