

ACE ROOF COATINGS, INC.

OUTSIDE UNITED STATES CALL COLLECT 1-352-323-3500

Safety Data Sheet Liquid TPO[®] BIO Rust Inhibitor SECTION 1: Identification

Product identifier

Product name

Liquid TPO® BIO Rust Inhibitor

Product number Brand 7891450 Liquid TPO®

Recommended use of the chemical and restrictions on use BIO certified roof repair for rusted areas.

Supplier's details

| Emergency phone number(s) | INFOTRAC - 800-535-5053 |
|---------------------------|-------------------------|
| email | info@arcroofcoat.com |
| Fax | 469-366-9219 |
| Telephone | 972-864-0240 |
| | United States |
| | Rowlett, TX 75088 |
| Address | 4821 Grisham Drive |
| Name | Ace Roof Coatings, Inc. |
| | |

SECTION 2: Hazard identification

Classification of the substance or mixture

GHS classification in accordance with OSHA (29 CFR 1910.1200)

- Flammable liquids (chapter 2.6), Cat. 3
- Acute toxicity (chapter 3.1), Cat. 4
- Eye damage/irritation (chapter 3.3), Cat. 2A
- Specific target organ toxicity, single exposure (chapter 3.8), Cat. 3
- Skin corrosion/irritation (chapter 3.2), Cat. 2
- Hazardous to the aquatic environment long-term hazard (chapter 4.1), Cat. 2
- Flammable liquids (chapter 2.6), Cat. 2
- Sensitization, skin (chapter 3.4), Cat. 1
- Hazardous to the aquatic environment acute hazard (chapter 4.1), Cat. 1
- Hazardous to the aquatic environment long-term hazard (chapter 4.1), Cat. 1

GHS label elements, including precautionary statements

Pictogram



Signal word

Danger

| Hazard statement(s) | |
|----------------------------|-----------------------------------------------------------------------------|
| H225 | Highly flammable liquid and vapor |
| H226 | Flammable liquid and vapor |
| H312 | Harmful in contact with skin |
| H315 | Causes skin irritation |
| H317 | May cause an allergic skin reaction |
| H319 | Causes serious eye irritation |
| H332 | Harmful if inhaled |
| H335 | |
| H336 | May cause respiratory irritation |
| | May cause drowsiness or dizziness |
| H400 | Very toxic to aquatic life |
| H410 | Very toxic to aquatic life with long lasting effects |
| H411 | Toxic to aquatic life with long lasting effects |
| Precautionary statement(s) | |
| P210 | Keep away from heat, hot surfaces, sparks, open flames, and other ignition |
| | sources. No smoking. |
| P233 | Keep container tightly closed. |
| P240 | Ground/bond container and receiving equipment. |
| P241 | Use explosion-proof electrical/ventilating/lighting/equipment. |
| P242 | Use only non-sparking tools. |
| P243 | Take precautionary measures against static discharge. |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| P303+P361+P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse |
| | skin with water/shower. |
| P370+P378 | In case of fire: Use foam, fog, dry chemical CO2, or water to extinguish. |
| P403+P235 | Store in a well ventilated place. Keep cool. |
| P501 | Dispose of contents/container in accordance with Federal, State and local |
| | regulations |
| P264 | Wash any exposed skin thoroughly after handling. |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove |
| | contact lenses if present and easy to do. Continue rinsing. |
| P337+P313 | If eye irritation persists: Get medical advice/attention. |
| P261 | Avoid breathing dust/fume/gas/mist/vapours/spray. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P304+P340 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. |
| P312 | Call a POISON CENTER/doctor if you feel unwell. |
| P403+P233 | Store in a well ventilated place. Keep container tightly closed. |
| | |
| P405 | Store locked up. |
| P302+P352 | IF ON SKIN: Wash with plenty of water/soap. |
| P321 | Specific treatment (see first aid instructions on this label). |
| P332+P313 | If skin irritation occurs: Get medical advice/attention. |
| P362+P364 | Take off contaminated clothing and wash it before reuse. |
| P273 | Avoid release to the environment. |
| P391 | Collect spillage. |
| P272 | Contaminated work clothing should not be allowed out of the workplace. |
| P333+P313 | If skin irritation or a rash occurs: Get medical advice/attention. |
| | |

Other hazards which do not result in classification No data available.

Statement regarding ingredients of unknown toxicity (OSHA) Not applicable. Mixtures

Hazardous components 1. Component 1 (trade secret) Concentration 5 - 10 % (Weight) 2. Calcium carbonate Concentration 20 - 40 % (Weight) CAS no. 471-34-1 **3. TITANIUM DIOXIDE** Concentration 10 - 20 % (Weight) CAS no. 13463-67-7 4. Solvent naphtha (petroleum), light arom 15 - 25 % (Weight) Concentration 64742-95-6 CAS no. - Flammable liquids (chapter 2.6), Cat. 3 - Acute toxicity (chapter 3.1). Cat. 4 - Skin corrosion/irritation (chapter 3.2), Cat. 2 H226 Flammable liquid and vapor H312 Harmful in contact with skin H315 Causes skin irritation Harmful if inhaled H332 5. Component 5 (trade secret) Concentration 10 - 15 % (Weight) 6. Component 6 (trade secret) 10 - 20 % (Weight) Concentration 7. zinc bis(dibutyldithiocarbamate) Concentration 1 - < 0 % (Weight) EC no. 205-232-8 CAS no. 136-23-2 Index no. 006-081-00-9 - Eye damage/irritation (chapter 3.3), Cat. 2 - Specific target organ toxicity, single exposure (chapter 3.8), Cat. 3 - Skin corrosion/irritation (chapter 3.2), Cat. 2 - Sensitization, skin (chapter 3.4), Cat. 1 - Hazardous to the aquatic environment - acute hazard (chapter 4.1). Cat. 1 - Hazardous to the aquatic environment - long-term hazard (chapter 4.1), Cat. 1 H315 Causes skin irritation H317 May cause an allergic skin reaction H319 Causes serious eye irritation H335 May cause respiratory irritation H400 Very toxic to aquatic life H410 Very toxic to aquatic life with long lasting effects 8. Component 8 (trade secret) Concentration 2 - 8 % (Weight) 9. Component 9 (trade secret) Concentration 1 - 2 % (Weight)

Trade secret statement (OSHA 1910.1200(i))

Specific chemical identity and exact percentage (concentration) of composition has been withheld as a trade secret.

SECTION 4: First-aid measures

Description of necessary first-aid measures

| General advice | In case of accident or if you feel unwell, seek medical advice IMMEDIATELY. (Show the product label where possible) |
|----------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| If inhaled | Remove victim from exposure to well-ventilated area. If breathing is labored, qualified personnel should administer oxygen. Apply artificial respiration if breathing has ceased or shows signs of failing. Call a Physician. |
| In case of skin contact | Remove contaminated clothing. Immediately wash affected areas thoroughly with soap and water. If irritation, redness, or a burning sensation develops and persists, obtain medical advice. Contaminated clothing should be thoroughly cleaned before reuse. |
| In case of eye contact | Immediately flush eyes running water for a minimum of 15 minutes. Hold eyelids open during flushing. If irritation persists, repeat flushing. Obtain medical attention IMMEDIATELY. |
| If swallowed | Do NOT induce vomiting. Provided the patient is conscious, wash out mouth with water then give 1 or 2 glasses of water to drink. This material can enter lungs during swallowing or vomiting and cause lung inflammation and damage. Refer person to medical personnel for immediate attention. |
| Personal protective equipment for fire | st-aid responders None. |

Most important symptoms/effects, acute and delayed No data available.

Indication of immediate medical attention and special treatment needed, if necessary No data available.

SECTION 5: Fire-fighting measures

Suitable extinguishing media

Use foam, fog, dry chemical CO2, or water.

Specific hazards arising from the chemical Carbon oxides

Special protective actions for fire-fighters

As appropriate for surrounding materials/equipment. If electrical equipment is involved, the use of foam should be avoided. No unusual fire or explosion hazards.

Further information

No data available.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Remove all sources of ignition. Ventilate area.

Environmental precautions

In case of large spill, dike the area to prevent this material from entering water systems or sewers.

Methods and materials for containment and cleaning up

Absorb spill with an absorbent material such as sawdust, vermiculite or sand, and place in a closed container.

Reference to other sections

No data available.

SECTION 7: Handling and storage

Precautions for safe handling

Avoid open flames, electrical sparks or static electricity.

Conditions for safe storage, including any incompatibilities

Keep containers properly sealed and when stored indoors, in a well-ventilated area. Avoid storage above 110 °F

Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection

Control parameters 1. Titanium dioxide - Total dust (CAS: 13463-67-7) PEL (Inhalation): 15 mg/m3 (OSHA) OSHA Annotated Table Z-1, www.osha.gov 2. Titanium dioxide - Total dust (CAS: 13463-67-7) PEL (Inhalation): See PNOR (Cal/OSHA) OSHA Annotated Table Z-1, www.osha.gov 3. Titanium dioxide - Total dust (CAS: 13463-67-7) REL (Inhalation): Ca, (ultrafine particles), 2.4 mg/m3Efine), 0.3 mg/m3(ultrafine), See Appendix A, See Appendix C (NIOSH) OSHA Annotated Table Z-1, www.osha.gov 4. Xylenes (o-, m-, p-isomers) (CAS: 1330-20-7) PEL (Inhalation): 100 ppm (OSHA) OSHA Annotated Table Z-1, www.osha.gov 5. Xylenes (o-, m-, p-isomers) (CAS: 1330-20-7) PEL (Inhalation): 435 mg/m3 (OSHA) OSHA Annotated Table Z-1, www.osha.gov 6. Xylenes (o-, m-, p-isomers) (CAS: 1330-20-7) PEL (Inhalation): 100 ppm, (ST) 150 ppm, (C) 300 ppm (Cal/OSHA) OSHA Annotated Table Z-1, www.osha.gov 7. Xylenes (o-, m-, p-isomers) (CAS: 1330-20-7) REL (Inhalation): 100 ppm, (ST) 150 ppm (NIOSH) OSHA Annotated Table Z-1, www.osha.gov 8. Ethyl benzene (CAS: 100-41-4) PEL (Inhalation): 100 ppm (OSHA) OSHA Annotated Table Z-1, www.osha.gov 9. Ethyl benzene (CAS: 100-41-4) PEL (Inhalation): 435 mg/m3 (OSHA) OSHA Annotated Table Z-1, www.osha.gov 10. Ethyl benzene (CAS: 100-41-4) PEL (Inhalation): 100 ppm, (ST) 125 ppm (Cal/OSHA) OSHA Annotated Table Z-1, www.osha.gov 11. Ethyl benzene (CAS: 100-41-4) REL (Inhalation): 100 ppm, (ST) 125 ppm (NIOSH) OSHA Annotated Table Z-1, www.osha.gov

Appropriate engineering controls

Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below TLV (s). General ventilation is recommended. Additional local exhaust ventilation is recommended where vapors, mists, or aerosols may be released. For guidance on engineering control measures refer to publications such as the ACGIH current edition of "Industrial Ventilation, a manual of Recommended Practice."

Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection

Chemical splash goggles in compliance with OSHA regulations are advised. However, OSHA regulations also permit other types of safety glasses. (Consult your safety equipment supplier)

Skin protection

Wear protective clothing to prevent skin contact. Keep exposed skin area to a minimum. Protective clothing should be selected and used in accordance with "Guidelines for the Selection of Chemical Protective Clothing" published by ACGIH. Eye wash station and safety shower should be available.

Body protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

This product has demonstrated no observable effects at room temperature; however, it is highly recommended that an air-purifying respirator with organic filter cartridges be worn. In addition, in any interior, confined space, spray application, a supplied air source must be provided. When the product is sprayed or heated without adequate ventilation, an approved MSHA/NIOSH positive-pressure, supplied-air respirator may be required. Air purifying respirators equipped with organic vapor cartridges and a Hepa (P100) particulate filter may be used under certain conditions when a cartridge change-out schedule has been developed in accordance with the OSHA preparatory protection standard (29 CFR. 1910.134).

Thermal hazards

No data available.

Environmental exposure controls

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

| Appearance/form Odor | Viscous liquid Solvent odor |
|-----------------------------------------|--------------------------------|
| Odor threshold | No data available. |
| | |
| рН | 8.5 – 9.0 |
| Melting point/freezing point | No data |
| Initial boiling point and boiling range | 313°F - 572°F (156°c - 300°C) |
| Flash point | 114°F |
| Evaporation rate | .36 |
| Flammability (solid, gas) | No data available. |
| Upper/lower flammability limits | No data |
| Upper/lower explosive limits | 0.5% / 6.0% |
| Vapor pressure | 2.9 |
| Vapor density | Heavier than air |
| Relative density | No data |

Solubility(ies) Partition coefficient: n-octanol/water Auto-ignition temperature Decomposition temperature Viscosity Explosive properties Oxidizing properties Insoluble in water No data No data 4,000 - 12,000 cps No data No data

Other safety information No data available.

SECTION 10: Stability and reactivity

Reactivity No data available. Chemical stability Stable under recommended storage conditions. Possibility of hazardous reactions None known. Conditions to avoid Avoid storage above 110°F. Incompatible materials Strong oxidizing agents. Hazardous decomposition products By fire: Carbon Dioxide, Carbon Monoxide

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity

No information available.

Skin corrosion/irritation

Exposure causes skin irritation. Prolonged or repeated exposure may dry the skin. Symptoms may include redness, burning, drying and cracking. Skin absorption is possible, but harmful effects are not expected from this route of exposure under normal `conditions of handling and use

Serious eye damage/irritation

Exposure to liquid or vapor causes eye irritation. Symptoms may include stinging, tearing, redness and swelling. Respiratory or skin sensitization

Short-term inhalation toxicity is low. Breathing small amounts during normal handling is not likely to cause harmful effects. Breathing large amounts may cause overexposure symptoms, such as headache, nausea, and irritation of nose and throat.

Carcinogenicity

The ingredients of this product are not classified as carcinogenic by ACGIH or IARC, not regulated as carcinogens by OSDHA, and not listed as carcinogens by NTP.

Additional information

No information available.

SECTION 12: Ecological information

Toxicity No data available

SECTION 13: Disposal considerations

Disposal of the product

Liquid waste must be disposed of in accordance with Federal, State and local regulations. Incineration is the preferred method.

Disposal of contaminated packaging

Empty containers should be decontaminated and either passed to an approved drum recycler or destroyed.

Waste treatment

This product, as supplied, is regulated as a hazardous waste by the U.S. Environmental Protection Agency (EPA) under Resource Conservation and Recovery Act (RCRA) regulations. If discarded in its purchased form, this product is a RCRA hazardous waste. It is the responsibility of the product user to determine at the time of disposal, whether a material containing the product or residue of the product remains classified a hazardous waste as per 40 CFR 261, Subpart C. State or local regulations may also apply if they differ from the federal regulation.

Sewage disposal

Chemical waste, even small quantities should never be poured down drains, sewers or waterways.

Other disposal recommendations

RCRA HAZARD CLASS: D001, Ignitable Hazardous Waste

SECTION 14: Transport information

| | UN Number UN Proper Shipping Name | None None | |
|------|--------------------------------------------------------------------------|--------------|--|
| 14.3 | Transport hazard class(es) | None | |
| 14.4 | Packing group | None | |
| | Environmental hazards | None | |
| | Special precautions for user | None | |
| | Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code | | |

SECTION 15: Regulatory information

Safety, health and environmental regulations specific for the product in question

Toxic Substances Control Act (TSCA) Inventory

This material or its components are listed on the TSCA Chemical Substance Inventory and is in compliance with all applicable rules and orders. One or more of the components may be exempt from listing on the TSCA Inventory.

SARA 311/312 Hazards

Acute Health Hazard, Chronic Health Hazard, Fire Hazard

New Jersey Right To Know Components

Common name: ZINC CHROMATE CAS number: 13530-65-9

Pennsylvania Right To Know Components

Chemical name: Chromic acid, zinc salt (1:1) CAS number: 13530-65-9

California Prop. 65 components

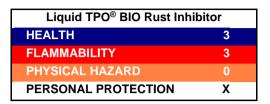
Chemical name: Zinc chromate CAS number: 13530-65-9 02/27/1987 - Cancer

12/19/2008 - Developmental, female, male

Chemical Safety Assessment

No data available.

HMIS Rating



NFPA Rating



SECTION 16: Other information

Further information/disclaimer

This information relates to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of our knowledge and belief, accurate and reliable as of the date compiled. However, no representation, warranty or guarantee, expressed or implied, is made as to its accuracy, reliability, or completeness. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his particular use. We do not accept liability for any loss or damage that may occur from the use of this information. Nothing herein shall be construed as a recommendation for uses which infringe valid patents or as extending a license of valid patents.

Preparation information

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