# SAFETY DATA SHEET

## SECTION 1 - Chemical Product and Company Information

Product Name: TWP REDWOOD  Product Code: TWP102

Manufactured by:
**Gemini Coatings**
**2300 Holloway Drive**
**El Reno, OK  73036**
**800-262-5710**

**24- Hour Emergency (Spill, Leak, Exposure or Accident):**
**INFOTRAC 800-535-5053**
**Outside USA, Call Collect 1-352-323-3500**

**24- Hour Emergency HAZMAT Response and MSDS Help:**
**EMI 800-510-8510**

Product Use: A protective and/or decorative finish or accompanying product (reference label or product data sheet for more information).
Not recommended for: Any other use not detailed on product data sheet or label .

## SECTION 2 - Hazards Identification

### GHS Ratings:

| | | |
|---|---|---|
| Flammable liquid | 3 | Flash point >= 23°C and <= 60°C (140°F) |
| Skin corrosive | 2 | Reversible adverse effects in dermal tissue, Draize score: >= 2.3 < 4.0 or persistent inflammation |
| Eye corrosive | 2A | Eye irritant: Subcategory 2A, Reversible in 21 days |
| Mutagen | 1B | Known to produce heritable mutations in human germ cellsSubcategory 1B, Positive results: In vivo heritable germ cell tests in mammals, Human germ cell tests, In vivo somatic mutagenicity tests, combined with some evidence of germ cell mutagenicity |
| Carcinogen | 1B | Presumed Human Carcinogen, Based on demonstrated animal carcinogenicity |
| Reproductive toxin | 1B | Presumed, Based on experimental animals |
| Aspiration hazard | 1 | Aspiration Toxicity Category 1: Known (regarded)- human evidence - hydrocarbons with kinematic viscosity ? 20.5 mm2/s at 40° C. |

### GHS Hazards

| | |
|---|---|
| H226 | Flammable liquid and vapour |
| H304 | May be fatal if swallowed and enters airways |
| H315 | Causes skin irritation |
| H319 | Causes serious eye irritation |
| H340 | May cause genetic defects |
| H350 | May cause cancer |
| H360 | May damage fertility or the unborn child |

### GHS Precautions

| | |
|---|---|
| P201 | Obtain special instructions before use |
| P202 | Do not handle until all safety precautions have been read and understood |
| P210 | Keep away from heat/sparks/open flames/hot surfaces – No smoking |
| P233 | Keep container tightly closed |
| P240 | Ground/bond container and receiving equipment |
| P241 | Use explosion-proof electrical/ventilating/light/mixers/equipment |
| P242 | Use only non-sparking tools |
| P243 | Take precautionary measures against static discharge |
| P264 | Wash any exposed skin thoroughly after handling |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection |

| | |
|---|---|
| P281 | Use personal protective equipment as required |
| P321 | Specific treatment (see First Aid section on this label) |
| P331 | Do NOT induce vomiting |
| P362 | Take off contaminated clothing and wash before reuse |
| P301+P310 | IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician |
| P302+P352 | IF ON SKIN: Wash with soap and water |
| P303+P361+P353 | IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower |
| P305+P351+P338 | IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do – continue rinsing |
| P308+P313 | IF exposed or concerned: Get medical advice/attention |
| P332+P313 | If skin irritation occurs: Get medical advice/attention |
| P337+P313 | Get medical advice/attention |
| P370+P378 | In case of fire: Use the NFPA Class B extinguisher for extinction |
| P405 | Store locked up |
| P403+P235 | Store in a well ventilated place. Keep cool |
| P501 | Do not flush to sewer, watershed or waterway. Dispose of product in accordance with applicable local, county, state and federal regulations. |

**Signal Word:** **Danger**

**SECTION 3 - Composition/Information on Ingredients**

| Chemical Name / CAS No. | OSHA Exposure Limits | ACGIH Exposure Limits | Other Exposure Limits |
|---|---|---|---|
| MINERAL SPIRITS<br>8052-41-3<br>60 to 70% | 500 ppm TWA; 2900 mg/m3 TWA | 100 ppm TWA | NIOSH: 350 mg/m3 TWA<br>1800 mg/m3 Ceiling (15 min) |
| Linseed oil<br>8001-26-1<br>10 to 20% | | | |
| Benzene, 1,2,4-trimethyl-<br>95-63-6<br>1 to 5% | | | NIOSH: 25 ppm TWA; 125 mg/m3 TWA |
| PROPRIETARY TWP1<br>PROPRIETARY TWP1<br>1 to 5% | | | |

| | | | |
|---|---|---|---|
| Iron oxide (Fe2O3)<br>1309-37-1<br>1 to 5% | 10 mg/m3 TWA (fume); 15 mg/m3 TWA (total dust, listed under Rouge); 5 mg/m3 TWA (respirable fraction, listed under Rouge) | 5 mg/m3 TWA (respirable fraction) | NIOSH: 5 mg/m3 TWA (dust and fume, as Fe) |
| Naphtha, petroleum, hydrotreated heavy<br>64742-48-9<br>1 to 5% | | | |
| Paraffin waxes and Hydrocarbon waxes<br>8002-74-2<br>1 to 5% | | 2 mg/m3 TWA (fume) | NIOSH: 2 mg/m3 TWA (fume) |
| 2-Butanone, oxime<br>96-29-7<br>0.1 to 1.0% | | | |
| Ethylbenzene<br>100-41-4<br>0.1 to 1.0% | 100 ppm TWA; 435 mg/m3 TWA | 20 ppm TWA | NIOSH: 100 ppm TWA; 435 mg/m3 TWA<br>125 ppm STEL; 545 mg/m3 STEL |

## SECTION 4 - First Aid Measures

**Inhalation:**
Remove exposed individual to fresh air and assist breathing if necessary. Seek medical attention.
**Eye Contact:**
Flush eyes with lukewarm water for 15 minutes. Seek medical attention immediately.
**Skin:**
Remove contaminated clothing, wash area immediately with soap and water. See physician if irritation persists.
**Ingestion:**
Rinse mouth out immediately. Drink 1 or 2 glasses of water to dilute. DO NOT induce vomiting. Contact physician or poison control center immediately.

## SECTION 5 - Fire Fighting Measures

Alcohol Foam, CO2, Dry Chemical
Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Closed containers may explode when exposed to extreme heat. Do not apply to hot surfaces. Never use welding or cutting torch on or near container (even empty) because product (even residue) may ignite explosively. Liquid and vapor states of this substance are dangerous fire hazards and moderate explosion hazards when exposed to heat or flame.

** Rags, steel wool, and paper towels soaked with this product may spontaneously catch fire if improperly stored and/or discarded. Immediately after each use place rags, steel wool, and paper towels in a sealed water-filled container to prevent spontaneous combustion.
Oxidation may produce carbon and nitrogen oxides.
Clear fire area of unprotected personnel. Do not enter confined space without helmet, face shield, bunker coat, gloves, rubber boots and a positive pressure NIOSH-approved self-contained breathing apparatus. A water stream can scatter flames. A spray of water may be used to cool closed containers to prevent pressure buildup and possible auto ignition or explosion when exposed to extreme heat. If water is used, fog nozzles are preferable.
Use the National Fire Protection Association Class B extinguisher.

## SECTION 6 - Accidental Release Measures

Stay upwind and away from spill or leak unless wearing appropriate protective equipment. Stop and/or contain discharge if it may be done safely. Keep all sources of ignition away. Ventilate area of spill. Use non-sparking tools for clean up. Cover with inert material to reduce fumes. Keep out of drains, sewer or waterways.

If large spill occurs, alert spill response teams. Contact fire authorities. Notify local health and pollution control agencies.

** Rags, steel wool, and paper towels soaked with this product may spontaneously catch fire if improperly stored and/or discarded. Immediately after each use place rags, steel wool, and paper towels in a sealed water-filled container to prevent spontaneous combustion.

## SECTION 7- Handling and Storage

**Handling:**

Bond and ground metal containers when transferring liquid. Avoid free fall of liquid in excess of a few inches. Personnel should avoid inhalation of vapors. Personal contact with the product should be avoided. Should contact be made, remove saturated clothing and flush affected skin areas with water. Containers of this material may be hazardous when emptied. Since emptied containers retain product residues (vapor, liquid, and/or solid), all hazard precautions given in this sheet must be observed.

** Rags, steel wool, and paper towels soaked with this product may spontaneously catch fire if improperly stored and/or discarded. Immediately after each use place rags, steel wool, and paper towels in a sealed water-filled container to prevent spontaneous combustion.

**Storage:**

Keep product containers cool, dry and away from sources of ignition. Use and store this product with adequate ventilation. DO NOT SMOKE in or near storage areas.

## SECTION 8 - Exposure Controls/Personal Protection

| Chemical Name / CAS No. | OSHA Exposure Limits | ACGIH Exposure Limits | Other Exposure Limits |
|---|---|---|---|
| MINERAL SPIRITS<br>8052-41-3 | 500 ppm TWA; 2900 mg/m3 TWA | 100 ppm TWA | NIOSH: 350 mg/m3 TWA<br>1800 mg/m3 Ceiling (15 min) |
| Linseed oil<br>8001-26-1 | | | |
| Benzene, 1,2,4-trimethyl-<br>95-63-6 | | | NIOSH: 25 ppm TWA;<br>125 mg/m3 TWA |
| PROPRIETARY TWP1<br>PROPRIETARY TWP1 | | | |
| Iron oxide (Fe2O3)<br>1309-37-1 | 10 mg/m3 TWA (fume); 15 mg/m3 TWA (total dust, listed under Rouge); 5 mg/m3 TWA (respirable fraction, listed under Rouge) | 5 mg/m3 TWA (respirable fraction) | NIOSH: 5 mg/m3 TWA (dust and fume, as Fe) |
| Naphtha, petroleum, hydrotreated heavy<br>64742-48-9 | | | |
| Paraffin waxes and Hydrocarbon waxes<br>8002-74-2 | | 2 mg/m3 TWA (fume) | NIOSH: 2 mg/m3 TWA (fume) |
| 2-Butanone, oxime<br>96-29-7 | | | |
| Ethylbenzene<br>100-41-4 | 100 ppm TWA; 435 mg/m3 TWA | 20 ppm TWA | NIOSH: 100 ppm TWA; 435 mg/m3 TWA<br>125 ppm STEL; 545 mg/m3 STEL |

Use local exhaust as required to control vapor concentrations.
Avoid prolonged or repeated breathing of vapors.

**Respiratory Protection:**

If exposure exceeds TLV or PELs, use NIOSH approved respirator to prevent overexposure.

**Skin Protection:**

Required for prolonged or repeated contact. Wear resistant gloves such as natural rubber, neoprene, buna N or nitrile.
An apron should be worn to avoid skin contact.

**Eye Protection:**
Wear splash proof googles and face shield if there is a likelihood of contact with eyes .

**Hygenic Practices**
Wash hands thoroughly before eating or using the restroom . Remove contaminated clothing immediately and do not wear again until it has been properly laundered.

## SECTION 9 - Physical and Chemical Properties

| | |
|---|---|
| **Vapor Density** Heavier Than Air | **Evaporation Rate** Faster than Butyl Acetate |
| **Boiling range:** 150°C | **Melting point:** N/A |
| **Freezing point:** N/A | **Flash point:** 115 F,46 C |
| **Flammability:** N/A | **Explosive Limits:** N/A |
| **Autoignition temperature:** 226°C | **Decomposition temperature:** N/A |
| **Relative Density:** N/A | **Vapor Pressure** N/A |
| **Odor threshold:** N/A | **pH:** N/A |
| **SPECIFIC GRAVITY** 0.8658 | **Solubility:** N/A |
| **Partition coefficient (n-octanol/water):** N/A | **Viscosity:** N/A |
| **Grams VOC less water:** N/A | **% VOLUME VOLATILE (VOC)** 67.9457 |
| **% WT. VOLATILE (VOC)** 61.4528 | **% Pig. by wt.** 1.9038 |
| **Lbs VOC/Gallon Solids** 13.9357 | **VOLATILE WT%** 61.6921 |
| **SOLIDS VOL%** 31.7934 | **DENSITY (Lb/Gal)** 7.2098 |
| **SPREAD @ 1 MIL** 509.9659 | **HAPS (lbs/gl)** 0.0062 |
| **Appearance** Colored Liquid | **Odor** N/A |
| **Physical State** Liquid | **Material VOC (g/l)** 530.9212 |
| **Coating VOC (g/l)** 532.3103 | **Material VOC (Lb/Gl)** 4.4306 |
| **Coating VOC (Lb/Gl)** 4.4422 | |

## SECTION 10 - Stability and Reactivity

**Stability:** Stable under normal conditions.

**Materials to Avoid:** Strong oxidizing agents, strong alkalines, strong mineral acids.

**Conditions to avoid:** high heat, sparks, flames, static discharge.

** Rags, steel wool, and paper towels soaked with this product may spontaneously catch fire if improperly stored an/or discarded. Immediately after each use place rags, steel wool, and paper towels in a sealed water-filled container to prevent spontaneous combustion.

**Hazardous Decomposition:** Oxidation may produce carbon and nitrogen oxides.
Hazardous polymerization will not occur.

## SECTION 11 - Toxicological Information

**Mixture Toxicity**

Inhalation Toxicity LC50: 702mg/L

**Component Toxicity**

96-29-7 2-Butanone, oxime

| | |
|---|---|
| | Oral LD50: 930 mg/kg (Rat) Dermal LD50: 0 mg/kg (Rabbit) Inhalation LC50: 20 mg/L (Rat) |
| 100-41-4 | Ethylbenzene<br>Oral LD50: 3,500 mg/kg (Rat) Inhalation LC50: 17 mg/L (Rat) |

**Primary Routes of Entry:** Inhalation, Skin Contact, Eyes, Ingestion

**Skin:**
Skin contact can cause redness, dryness or rash. Prolonged contact can cause irritation, dry skin, cracks, and dermititis.

**Ingestion:**
Can cause vomiting, nausea, diarrhea, and gastrointestinal irritation.

**Inhalation:**
Excessive inhalation of vapors can cause nasal and repiratory irritation, dizziness, weakness, fatigue, nausea, headache possible unconsciousness and even asphyxiation. High vapor concentrations or porlonged breathing of lower concentrations may result in damage to the liver, kidneys, lungs and blood forming organs . Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage.

**Eyes:**
Can cause irritation, redness, tearing and blurred vision.

**Carcinogenicity:** The following chemicals comprise 0.1% or more of this mixture and are listed and/or classified as carcinogens or potential carcinogens by NTP, IARC, OSHA (mandatory listing), or ACGIH (optional listing) .

| CAS Number | Description | % Weight | Carcinogen Rating |
|---|---|---|---|
| 100-41-4 | Ethylbenzene | 0.1 to 1.0% | Ethylbenzene: IARC: Possible human carcinogen<br>OSHA: listed |
| 64742-48-9 | Naphtha, petroleum, hydrotreated heavy | 1 to 5% | Naphtha, petroleum, hydrotreated heavy: EU REACH: Present (P) |
| 8052-41-3 | MINERAL SPIRITS | 60 to 70% | MINERAL SPIRITS: EU REACH: Present (P) |

## SECTION 12 - Ecological Information

**Ecological Information:**
Uncontrolled release of the product may result in contamination of air, ground, waterways and/or sewers .

**Component Ecotoxicity**

| | |
|---|---|
| Benzene, 1,2,4-trimethyl- | 96 Hr LC50 Pimephales promelas: 7.19 - 8.28 mg/L [flow-through]<br>48 Hr EC50 Daphnia magna: 6.14 mg/L |
| Naphtha, petroleum, hydrotreated heavy | 96 Hr LC50 Pimephales promelas: 2200 mg/L |
| 2-Butanone, oxime | 96 Hr LC50 Pimephales promelas: 777 - 914 mg/L [flow-through]; 96 Hr LC50 Poecilia reticulata: 760 mg/L [static]<br>48 Hr EC50 Daphnia magna: 750 mg/L<br>72 Hr EC50 Desmodesmus subspicatus: 83 mg/L |
| Ethylbenzene | 96 Hr LC50 Oncorhynchus mykiss: 11.0 - 18.0 mg/L [static]; 96 Hr LC50 Oncorhynchus mykiss: 4.2 mg/L [semi-static]; 96 Hr LC50 Pimephales promelas: 7.55 - 11 mg/L [flow-through]; 96 Hr LC50 Lepomis macrochirus: 32 mg/L [static]; 96 Hr LC50 Pimephales promelas: 9.1 - 15.6 mg/L [static]; 96 Hr LC50 Poecilia reticulata: 9.6 mg/L [static]<br>48 Hr EC50 Daphnia magna: 1.8 - 2.4 mg/L<br>72 Hr EC50 Pseudokirchneriella subcapitata: 4.6 mg/L; 96 Hr EC50 Pseudokirchneriella subcapitata: >438 mg/L; 72 Hr EC50 Pseudokirchneriella subcapitata: 2.6 - 11.3 mg/L [static]; 96 Hr EC50 Pseudokirchneriella subcapitata: 1.7 - 7.6 mg/L [static] |

## SECTION 13 - Disposal Considerations

Do not flush to sewer, watershed or waterway. Dispose of product in accordance with applicable local, county, state and federal regulations. See Section 8 for information on exposure control and necessary personal protective equipment.

## SECTION 14 - Transportation Information

Ship according to the Department of Transportation (DOT) 49 CFR regulations.

| Agency | Proper Shipping Name | UN Number | Packing Group | Hazard Class |
|---|---|---|---|---|
| DOT | TWP (WOOD PRESERVATIVE) | | | |

**Freight Class:** 55

## SECTION 15 - Regulatory Information

**California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986)**:
This product contains a listed substances known to the State of California to cause cancer, birth defects or other reproductive harm, at levels which would require a warning under the statute.

100-41-4 Ethylbenzene

This product contains a listed substances known to the State of California to cause cancer, birth defects or other reproductive harm, at levels which would require a warning under the statute.

**The following ingredients are listed in the TSCA Section 8(b) Inventory (Hydrated forms of chemical substances are exempt from the inventory as mixtures; the anhydrous chemical substances, however, are reportable for the Inventory):**

100-41-4 Ethylbenzene
96-29-7 2-Butanone, oxime
8002-74-2 Paraffin waxes and Hydrocarbon waxes
64742-48-9 Naphtha, petroleum, hydrotreated heavy
1309-37-1 Iron oxide (Fe2O3)
95-63-6 Benzene, 1,2,4-trimethyl-
8001-26-1 Linseed oil
8052-41-3 MINERAL SPIRITS

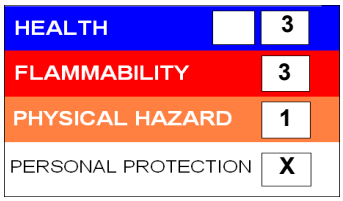
**US CAA Section 112 Hazardous Air Pollutants (HAPs) List**

100-41-4 Ethylbenzene

**US EPCRA (SARA Title III) Section 313 - Toxic Chemical:**

100-41-4 Ethylbenzene
95-63-6 Benzene, 1,2,4-trimethyl-

**Hazardous Material Information System (HMIS)**




**HMIS & NFPA Hazard Rating Legend**
*** = Chronic Health Hazard**
**0 = INSIGNIFICANT**
**1 = SLIGHT**
**2 = MODERATE**
**3 = HIGH**

## SECTION 16 - Disclaimer

Date Prepared: 7/2/2015
Date revised: 2015-04-09 Reviewer Revision 1

THIS DOCUMENT SUPERSEDES ANY PROVISION CONTAINED IN THE FORMS, LETTERS, AND PAPERS OF YOUR COMPANY. THIS PRODUCT IS DESIGNED AND INTENDED FOR PROFESSIONAL APPLICATION ONLY. ALL PRODUCTS SHOULD BE THOROUGHLY TESTED UNDER APPLICATION CONDITIONS PRIOR TO USE. THE INFORMATION CONTAINED HEREIN IS BELIEVED TO BE RELIABLE.HOWEVER, GEMINI MAKES NO WARRANTY CONCERNING THIS PRODUCT, WHETHER EXPRESS OR IMPLIED. INCLUDING THE WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. UNDER NO CIRCUMSTANCES SHALL GEMINI BE LIABLE FOR SPECIAL, INCIDENTAL, CONSEQUENTIAL OR ANY OTHER DAMAGES FROM ALLEGED NEGLIGENCE, BREACH OR WARRANTY, STRICT LIABILITY, OR ANY OTHER LEGAL THEORY,ARISING OUT OF

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