



SAFETY DATA SHEET

SECTION 1 - Chemical Product and Company Information

Product Name: TWP REDWOOD
Product Code: TWP102

Manufactured by:
AMTECO, Inc.
P.O. Box 9
1100 Jefferson Street
Pacific, MO 63069

24-hour Emergency (spill, leak, exposure or accident):
CHEMTREC 800-424-9300

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 $\geq 23^{\circ}\text{C}$ and $\leq 60^{\circ}\text{C}$ (140°F)
Skin corrosive	2	Reversible adverse effects in dermal tissue, Draize score: $\geq 2.3 < 4.0$ 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 mm ² /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 8052-41-3 60 to 70%	500 ppm TWA; 2900 mg/m ³ TWA	100 ppm TWA	NIOSH: 350 mg/m ³ TWA 1800 mg/m ³ Ceiling (15 min)
Linseed oil 8001-26-1 10 to 20%			
Benzene, 1,2,4-trimethyl- 95-63-6 1 to 5%			NIOSH: 25 ppm TWA; 125 mg/m ³ TWA

PROPRIETARY TWP1 PROPRIETARY TWP1 1 to 5%			
Iron oxide (Fe ₂ O ₃) 1309-37-1 1 to 5%	10 mg/m ³ TWA (fume); 15 mg/m ³ TWA (total dust, listed under Rouge); 5 mg/m ³ TWA (respirable fraction, listed under Rouge)	5 mg/m ³ TWA (respirable fraction)	NIOSH: 5 mg/m ³ TWA (dust and fume, as Fe)
Naphtha, petroleum, hydrotreated heavy 64742-48-9 1 to 5%			
Paraffin waxes and Hydrocarbon waxes 8002-74-2 1 to 5%		2 mg/m ³ TWA (fume)	NIOSH: 2 mg/m ³ TWA (fume)
Folpet 133-07-3 0.1 to 1.0%			
2-Butanone, oxime 96-29-7 0.1 to 1.0%			
Ethylbenzene 100-41-4 0.1 to 1.0%	100 ppm TWA; 435 mg/m ³ TWA	20 ppm TWA	NIOSH: 100 ppm TWA; 435 mg/m ³ TWA 125 ppm STEL; 545 mg/m ³ 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 8052-41-3	500 ppm TWA; 2900 mg/m3 TWA	100 ppm TWA	NIOSH: 350 mg/m3 TWA 1800 mg/m3 Ceiling (15 min)
Linseed oil 8001-26-1			
Benzene, 1,2,4-trimethyl- 95-63-6			NIOSH: 25 ppm TWA; 125 mg/m3 TWA
PROPRIETARY TWP1 PROPRIETARY TWP1			
Iron oxide (Fe2O3) 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 64742-48-9			
Paraffin waxes and Hydrocarbon waxes 8002-74-2		2 mg/m3 TWA (fume)	NIOSH: 2 mg/m3 TWA (fume)
Folpet 133-07-3			
2-Butanone, oxime 96-29-7			
Ethylbenzene 100-41-4	100 ppm TWA; 435 mg/m3 TWA	20 ppm TWA	NIOSH: 100 ppm TWA; 435 mg/m3 TWA 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 goggles and face shield if there is a likelihood of contact with eyes.

Hygienic 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

<p>Vapor Density Heavier Than Air</p> <p>Boiling range: 150 - 316°C</p> <p>Freezing point: N/A</p> <p>Flammability: N/A</p> <p>Autoignition temperature: 226°C</p> <p>Relative Density: N/A</p> <p>Odor threshold: N/A</p> <p>SPECIFIC GRAVITY 0.8658</p> <p>Partition coefficient (n- N/A octanol/water):</p> <p>Grams VOC less water: N/A</p> <p>% WT. VOLATILE (VOC) 61.6640</p> <p>Lbs VOC/Gallon Solids 13.9686</p> <p>SOLIDS VOL% 31.8273</p> <p>SPREAD @ 1 MIL 510.5104</p> <p>Appearance Colored Liquid</p> <p>Physical State Liquid</p> <p>Coating VOC (g/l) 532.7456</p> <p>Coating VOC (Lb/Gl) 4.4458</p>	<p>Evaporation Rate Faster than Butyl Acetate</p> <p>Melting point: N/A</p> <p>Flash point: 108°F,42°C</p> <p>Explosive Limits: N/A</p> <p>Decomposition temperature: N/A</p> <p>Vapor Pressure N/A</p> <p>pH: N/A</p> <p>Solubility: N/A</p> <p>Viscosity: N/A</p> <p>% VOLUME VOLATILE (VOC) 68.1727</p> <p>% Pig. by wt. 2.0999</p> <p>VOLATILE WT% 61.6640</p> <p>DENSITY (Lb/Gal) 7.2098</p> <p>HAPS (lbs/gl) 0.0068</p> <p>Odor N/A</p> <p>Material VOC (g/l) 532.7456</p> <p>Material VOC (Lb/Gl) 4.4458</p>
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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 and/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: 715mg/L

Component Toxicity

96-29-7 2-Butanone, oxime
Oral LD50: 930 mg/kg (Rat) Dermal LD50: 1,000 - (Rabbit) Inhalation LC50: 20 mg/L (Rat)

100-41-4 Ethylbenzene
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 dermatitis.

Ingestion:

Can cause vomiting, nausea, diarrhea, and gastrointestinal irritation.

Inhalation:

Excessive inhalation of vapors can cause nasal and respiratory irritation, dizziness, weakness, fatigue, nausea, headache possible unconsciousness and even asphyxiation. High vapor concentrations or prolonged 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).

<u>CAS Number</u>	<u>Description</u>	<u>% Weight</u>	<u>Carcinogen Rating</u>
100-41-4	Ethylbenzene	0.1 to 1.0%	Ethylbenzene: IARC: Possible human carcinogen 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]
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]
48 Hr EC50 Daphnia magna: 750 mg/L
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]
48 Hr EC50 Daphnia magna: 1.8 - 2.4 mg/L
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.

<u>Agency</u>	<u>Proper Shipping Name</u>	<u>UN Number</u>	<u>Packing Group</u>	<u>Hazard Class</u>
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 the following 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
- 133-07-3 Folpet

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
- 133-07-3 Folpet
- 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
- 133-07-3 Folpet
- 95-63-6 Benzene, 1,2,4-trimethyl-

Hazardous Material Information System (HMIS)

HEALTH	<input type="text" value="2"/>	HMIS & NFPA Hazard Rating Legend * = Chronic Health Hazard 0 = INSIGNIFICANT 1 = SLIGHT 2 = MODERATE 3 = HIGH
FLAMMABILITY	<input type="text" value="2"/>	
PHYSICAL HAZARD	<input type="text" value="0"/>	
PERSONAL PROTECTION	<input type="text" value="X"/>	

SECTION 16 - Disclaimer

Date Prepared: 10/21/2016

Date revised: 2016-10-04

Reviewer Revision 2

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, AMTECO 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 AMTECO 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 THE USE OR HANDLING OF THIS PRODUCT. THE SOLE REMEDY OF THE BUYER AND THE SOLE LIABILITY OF AMTECO FOR ANY CLAIMS SHALL BE LIMITED TO THE BUYER'S PURCHASE PRICE OF THE PRODUCT WHICH IS THE SUBJECT OF THE CLAIM OR THE AMOUNT ACTUALLY PAID FOR SUCH PRODUCT, WHICHEVER IS LESS. TECHNICAL ADVICE FURNISHED BY AMTECO SHALL NOT CONSTITUTE AN EXPRESS WARRANTY, WHICH IS EXPRESSLY DISCLAIMED. ALL TECHNICAL ADVICE GIVEN IS ACCEPTED AT THE RISK OF THE BUYER.