

MSDS Material Safety Data Sheet

Ralph Wilson Plastics Company

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Lokweld® 500 Adhesive

Revision Date: 01/28/11
Revision No: 3

1 PRODUCT AND COMPANY IDENTIFICATION

Common Name Lokweld® 500 Adhesive

Manufacturer RALPH WILSON PLASTICS COMPANY
P. O. BOX 6110 – 2400 WILSON PLACE
TEMPLE, TX 76503
INFORMATION PHONE: 800-433-3222 (USA)

Trade Name LW 500 Adhesive

Material Uses Adhesive for laminate

In Case of Emergency Contact CHEMTREC: 800-424-9300 (USA)
703-527-3887 (INTERNATIONAL)

2 HAZARDS IDENTIFICATION

Route of Entry: Skin, eyes, respiratory tract, ingestion.

Target Organs: Lung, liver, kidney, central nervous system (CNS), and peripheral nervous system.

Inhalation: Breathing vapors may cause dizziness, irregular heartbeat, narcosis, nausea, asphyxiation, and anesthetic effects. Product components are a severe irritation to the respiratory tract. Severe overexposure can result in death. May aggravate pre-existing respiratory conditions

Skin Contact: May cause skin irritation. May aggravate pre-existing skin conditions. Solvent components may act as a permeator (absorbed through skin). Long-term exposure may cause defatting of the skin and dermatitis.

Eye Contact: Will cause eye irritation.

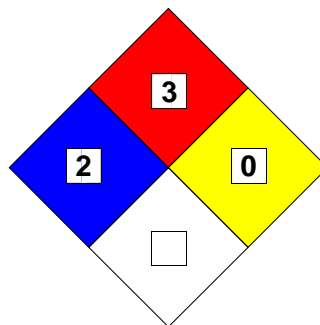
Ingestion: Not an expected route of entry. If ingested it may cause irritation to the gastro-intestinal tract.

DANGER! EXTREMELY FLAMMABLE LIQUID AND VAPOR. VAPOR MAY CAUSE FLASH FIRE. HARMFUL IF INHALED OR SWALLOWED. MAY CAUSE RESPIRATORY TRACT, EYE AND SKIN IRRITATION. USE ONLY WITH ADEQUATE VENTILATION.

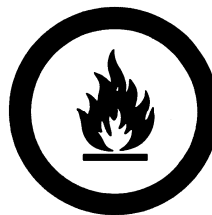
HMIS (United States):	
HEALTH	2*
FLAMMABILITY	3
REACTIVITY	0
PPE	C

* See Section 11

NFPA (United States):



WHMIS (Canada): B2, D2B



3 COMPOSITION/INFORMATION ON INGREDIENTS

Name	CAS #	% by Weight
Light Hydrotreated Distillate	68410-97-9	30 – 50
Acetone	67-64-1	20 – 40
n-Pentane	109-66-0	23 max
Toluene	108-88-3	5 – 15
Cyclohexane	110-82-7	7.5 max

n-Hexane

110-54-3

1.5 max

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FIRST AID MEASURES

Inhalation: Remove patient to fresh air. If patient is having difficulty breathing, seek immediate medical attention. If not breathing, clear airway and start artificial respiration. Seek immediate medical attention. Sudden death due to ventricular fibrillation has been reported in chronic solvent abusers. Overexposure may cause cardiopulmonary failure, CNS depression, peripheral neuropathy, and metabolic acidosis. Treat supportively.

Skin Contact: Remove contaminated clothing. Wash affected areas with soap and water. If irritation develops, seek medical attention.

Eye Contact: Flush eyes with water for 15 minutes. Remove contact lenses prior to water flush. Seek medical attention.

Ingestion: DO NOT induce vomiting. Seek immediate medical attention. DO NOT give anything by mouth to an unconscious person.

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FIRE FIGHTING MEASURES

Flash Point: 12.0°F (-11.1°C)

Flash Point Method: Closed Cup.

Autoignition Temp.: 437°F (225°C) for lowest known component – Light Hydrotreated Distillate.

Burning Rate: Not Available.

LEL: 2%.

UEL: 13%.

Flammability Classification: Flammable

Firefighting Equipment: Use self-contained breathing apparatus (SCBA) with a full-face piece and pressure demand or other positive-pressure mode.

Risk of Explosion Due to Mechanical Impact: Not Available.

Risk of Explosion Due to Static Discharge: Static discharge may serve as an ignition source for this product.

Hazardous Products of Combustion: Carbon Oxides (CO and CO₂), Aldehydes, and various Hydrocarbons.

Special Remarks: Extremely flammable liquid and vapor. Vapor may cause flash fires. Vapors are heavier than air and can travel long distances to ignition sources. Highly flammable in the presence of sparks or open flames. Flammable in the presence of heat and/or oxidizing materials. All electrical equipment in the area must be rated for flammable liquids. In case of fire, use dry chemicals, CO₂, or alcohol foam. Avoid water. Cool containing vessels with water jet to prevent pressure build-up, autoignition, or explosion.

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ACCIDENTAL RELEASE MEASURES

Personal Precautions: Wear appropriate PPE. Extremely flammable. Remove all sources of ignition. Make sure area is well ventilated. Spilled solvent may be slippery.

Environmental Precautions: Keep out of sewers and drains.

Clean-Up Methods: Dike and contain spill. Absorb spilled product with vermiculite, dry sand, or earth. Place in a suitable non-leaking container and tightly seal for disposal.

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HANDLING AND STORAGE

Handling Precautions: Wear appropriate PPE. Keep away from heat, sparks, and flames. If used indoors, make sure to provide adequate ventilation to prevent vapor build-up. Bond and ground containers when handling.

Storage Requirements: Store in a cool, dry, well-ventilated area. Ensure product is kept away from all sources of heat, sparks and open flame. Prohibit smoking in the storage area. Do not store with acids or oxidizers. Electrical service in storage area must be rated for flammable liquids.

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EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Provide exhaust ventilation or other engineering controls to keep airborne concentrations of vapors below their respective threshold limit value. Ensure that a working eyewash and safety shower are in the work area.

Protective Equipment: Wear splash goggles or safety glasses with side shields, synthetic apron, and neoprene or rubber gloves. In case of insufficient ventilation, wear an approved (NIOSH) respirator with organic vapor cartridge and dust/mist pre-filter.

Exposure Guidelines / Other:

Product Name	Exposure Limits
Acetone (CAS 67-64-1):	OSHA PEL: TWA 1000 ppm ACGIH TLV: TWA 500-ppm STEL 750 pp
Cyclohexane (CAS 110-82-7):	OSHA PEL: TWA 300 ppm ACGIH TLV: TWA 100 ppm
n-Hexane (CAS 110-54-3):	OSHA PEL: TWA 500 ppm ACGIH TLV: TWA 50 ppm
n-Pentane (CAS 109-66-0):	OSHA PEL: TWA 1000 ppm ACGIH TLV: TWA 600 ppm
Toluene (CAS 108-88-3):	OSHA PEL: TWA 200 ppm CL 300 ppm 500 ppm (10 minute max peak) ACGIH TLV: TWA 20 ppm

Consult local authorities and local regulations for exposure limits.

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PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Yellow-Brown Liquid

Physical State: Liquid

Odor: Strong solvent

Boiling Point: 132°F (56°C)

Evaporation Rate: Weighted Average is 5.71 (Butyl Acetate = 1)
Highest Component is 7.7 (Acetone)

Freezing / Melting Point: May start to solidify at 19°F (6.5°C)

Molecular Weight: Not Applicable

Percent Volatile: 79.5%

pH: Not Applicable

Solubility: Not Soluble in Water

Specific Gravity / Density: 6.7 lbs/gal

Viscosity: 200 – 600 cP

Vapor Density: Weighted Average is 2.65 (Air = 1)
Highest component is 3.14 for Toluene (Air = 1)

Vapor Pressure: 259 mm Hg @ 20°C (calculated)

VOC Calculated (Less Water and Exempt Solvents): 601 g/L (5.01 lbs./gal.)

VOC Calculated (Per Liter of Material): 448 g/L (3.74 lbs./gal.)

VHAP Calculated: 0.83 lbs. VHAP/lb. Solids or 1.09 lbs. VHAP/gal.

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STABILITY AND REACTIVITY

Stability: Product is stable as supplied.

Conditions to Avoid: All ignition sources and elevated temperatures.

Materials to Avoid (Incompatibility): Strong acids, and alkalis, oxidizing agents, reducing agents, copper, and copper alloys.

Hazardous Decomposition Products: Carbon Oxides (CO and CO₂) and various Hydrocarbons.

Hazardous Polymerization: Will not polymerize.

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TOXICOLOGICAL INFORMATION

Acute Toxicity to Animals:

Acetone (CAS 67-64-1):	Inhalation 4 hour LC50 = 30000 ppm (rat). Inhalation 4 hour LC50 = 18600 ppm (mouse). Oral LD50 = 5800 mg/kg (rat). Dermal LD50 > 16000 mg/kg (rabbit).
Cyclohexane (CAS 110-82-7):	Oral LD50 = 12850 mg/kg (rat). Dermal LD50 > 18000 mg/kg (rabbit).
n-Hexane (CAS 110-54-3):	Inhalation 4 hour LC50 = 38500 ppm (rat) Oral LD50 = 28700 mg/kg (rat)
n-Pentane (CAS 109-66-0):	Inhalation 4 hour LC50 > 6106 ppm (rat) Oral LD50 > 2000 mg/kg (rat)
Toluene (CAS 108-88-3):	Inhalation 4 hour LC50 = 7585 ppm (rat) Inhalation 4 hour LC50 = 7100 ppm (mouse) Oral LD50 = 5580 mg/kg (male rat) Dermal LD50 = 12125 mg/kg (rabbit)

Chronic Toxicity to Animals: No additional information.

Acute Toxicity to Humans: No additional information.

Chronic Effects on Humans: Classified PROVEN for human (n-Hexane). n-Hexane has been shown to cause neuropathy (numbness of arms and legs) in long-term exposures.

Carcinogenic Effects: Not classifiable for humans or animals.

Mutagenic Effects: Classified NONE for human.

Teratogenic Effects: Classified PROVEN for human (Toluene).

Developmental Toxicity: Classified PROVEN for human (Toluene). Causes damage to kidneys, liver, and central nervous system. Components of this product have been reported to cause spontaneous abortion in women that intentionally concentrated and inhaled vapors.

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ECOLOGICAL INFORMATION

Ecotoxicity: Product may kill grasses and small plants. Non-toxic to fish. Moderately toxic to amphibians by preventing dermal respiration. May cause gastrointestinal distress to birds and mammals by ingestion.

BOD5 and COD: Not Available.

Biodegradable / OECD: Not Available.

Toxicity of the Products of Biodegradation: Not Available.

Special Remarks on the Products of Biodegradation: Not Available.

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DISPOSAL CONSIDERATIONS

Spilled, contaminated, or waste material should be put into a suitable container and handled according to Federal, State, and local regulations. Contact a qualified waste management company for assistance. Do not incinerate, weld, cut, or braze container. Residual vapors may be explosive. Empty containers should be disposed of properly.

Dispose of in accordance with Federal, State, and local regulations.

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TRANSPORT INFORMATION

Proper Shipping Name: Adhesives (DOT), Flammable Liquid.

DOT Classification: Adhesives, Flammable Liquid, Hazard Class 3, UN 1133, Packing Group II, Limited Quantity 5L.

Special Provision for Transport: 5 Liters or less may use Limited Quantity exceptions (49CFR 172.102 & 49CFR 173.150).

ADR/RID Classification: Class 3; Flammable Liquid.

ICAO/IATA Classification: Class 3; Flammable Liquid.

IMO/MDG Classification: Class 3; Flammable Liquid.

Marine Pollutant: No.

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REGULATORY INFORMATION

U.S. Federal Regulations

Chemical (& CAS Number)	SARA 302 (EHS)TPQ	SARA 304 (EHS)Rq	SARA 313 <i>de minimis</i>	CERCLA Rq	CAA 112(r) TQ	RCRA Code
Acetone (67-64-1)				5000		U002
Cyclohexane (110-82-7)			1	1000		U056
n-Hexane (110-54-3)			1	5000		
n-Pentane (109-66-0)					10000	
Toluene (108-88-3)			1	1000		U220

All quantities in pounds

State Regulations

Chemical (& CAS Number)	CA Prop 65	MA RTK	MN RTK	NJ RTK	PA RTK	RI RTK
Acetone (67-64-1)		X	X	X	X	X
Cyclohexane (110-82-7)		X	X	X	X	X
n-Hexane (110-54-3)		X	X	X	X	X
n-Pentane (109-66-0)		X	X	X	X	X
Toluene (108-88-3)*	X	X	X	X	X	X

*WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

International Regulations

DSL (Canada): The chemicals in this product are listed.

EINECS: The chemicals in this product are listed.

WHMIS: B2, D2B.

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OTHER INFORMATION

Notice to Reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above named manufacturer nor any of its subsidiaries assumes any liability whatsoever for accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

END OF MSDS DOCUMENT