

Section 1. Chemical Product and Company Identification

Common Name	Wilsonart^(R) (WA) 110 Adhesive Solvent	Code	USA16374
Supplier	WILSONART INTERNATIONAL INC. P.O. BOX 6110 - 2400 Wilson Place, Temple, TX 76503 Telephone: 800-433-3222 (U.S.A.) or 254-207-7000	MSDS#	16374
Synonym	Also known as: Lokweld^(R) (LW) 110 Solvent	Validation Date	06/05/2000
Trade name	Wilsonart^(R) (WA) 110 Adhesive Solvent	Print Date	06/05/2000
Material Uses	Cleaner for Wilsonart ^(R) Adhesives and laminate surfaces.	Responsible Name	Wilsonart International Inc.
Manufacturer	WILSONART INTERNATIONAL, INC. P.O. BOX 6110, Temple, TX 76503-6110 Information Phone: 254-207-7000 or 800-433-3222	In Case of Emergency	CHEMTREC: 800-424-9300 (USA) 703-527-3887 (International)

Section 2. Composition and Information on Ingredients

Name	CAS #	% by Weight	Exposure Limits
Toluene	108-88-3	15-40	TWA: 100 ppm; STEL: 150 ppm OSHA (PEL) TWA: 50 ppm ACGIH (TLV); STEL: 150 ppm NIOSH
Acetone	67-64-1	15-40	TWA: 500 ppm; STEL: 1000 (ppm) [1997] TWA: 750 ppm; STEL: 1000 ppm; CEIL: 1000 ppm ACGIH (TLV) [1989] TWA: 500 ppm DFG MAK
Hexane isomers	N/A	40-60	TWA: 1000 ppm; STEL: 1250 ppm [1989] TWA: 1760 mg/m ³ ; CEIL: 3500 mg/m ³ ACGIH (TLV) TWA: 500 ppm; STEL: 1000 ppm ACGIH (TLV)
N-hexane	110-54-3	1-5	TWA: 200 ppm DFG MAKs TWA: 176 mg/m ³ ACGIH (TLV) TWA: 50 ppm ACGIH (TLV) TWA: 200 ppm DFG MAKs

Section 3. Hazards Identification

Physical State and Appearance	Liquid.
Emergency Overview	DANGER! EXTREMELY FLAMMABLE LIQUID AND VAPOR, VAPOR MAY CAUSE FLASH FIRE. HARMFUL IF SWALLOWED OR INHALED. May be irritating to eyes, respiratory system and skin. Central nervous system depression.
Routes of Entry	Absorbed through skin. Skin contact. Eye contact. Inhalation.
Potential Acute Health Effects	<p>Eyes This product is an eye irritant.</p> <p>Skin Irritating to skin. Prolonged or repeated contact may dry skin and cause irritation. Permeator (absorbed through the intact skin).</p> <p>Inhalation Inhalation of the vapors may cause dizziness, nausea, or anaesthetic effects. Central nervous system depression. Continued overexposure by inhalation may be fatal.</p> <p>Ingestion Not an expected route of entry. Harmful if swallowed. Ingestion may cause vomiting. May cause mild gastric irritation, abdominal spasms, nausea and faintness.</p>

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Potential Chronic Health Effects	The substance is toxic to kidneys, lungs, liver, the nervous system. Repeated or prolonged inhalation of vapors may lead to chronic respiratory irritation. Chronic overexposure may cause arrhythmias (heart beat irregularity) and peripheral nervous system effects. Long term skin contact to solvents may produce defatting of the skin and dermatitis.
Medical Conditions Aggravated by Overexposure:	Individuals with preexisting lung disease, asthma, or breathing difficulties may have increased susceptibility to the toxicity of excessive exposures.
Overexposure /Signs/Symptoms	Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening.
See Toxicological Information (section 11)	

Section 4. First Aid Measures

Eye Contact	Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek medical attention.
Skin Contact	Wash contaminated skin with soap and water. If the product got onto the clothed portion of the body, remove the contaminated clothes as quickly as possible. Place the victim under a deluge shower. If irritation occurs, seek medical attention. Wash contaminated clothing before reusing.
Inhalation	Allow the victim to rest in a well ventilated area. Oxygen may be administered if breathing is difficult. If irritation or difficult breathing persists, seek immediate medical attention.
Ingestion	Do not induce vomiting. Have conscious person drink several glasses of water or milk. NEVER give an unconscious person anything to ingest. Seek medical attention.
Notes to Physician	Sudden death due to ventricular fibrillation has been reported from acute inhalation in chronic solvent abusers. Treat patient supportively. Life support measures should be provided because CNS depression cardiopulmonary failure, and metabolic acidosis have been reported in massive overexposures.

Section 5. Fire Fighting Measures

Flammability of the Product	Flammable.
Auto-ignition Temperature	The lowest known value is 225°C (437°F) (Hexane isomers).
Flash Points	CLOSED CUP: -14.4°C (6°F). (Pensky-Martens.)
Flammable Limits	LOWER: 2% UPPER: 13%
Products of Combustion	These products are carbon oxides (CO, CO ₂).
Fire Hazards in Presence of Various Substances	Extremely flammable in presence of open flames and sparks. Highly flammable in presence of heat. Slightly flammable to flammable in presence of oxidizing materials, of reducing materials, of combustible materials. Non-flammable in presence of moisture.
Explosion Hazards in Presence of Various Substances	Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available. Slightly explosive to explosive in presence of oxidizing materials.
Fire Fighting Media and Instructions	Flammable liquid, insoluble in water. SMALL SPILL: Use DRY chemicals, CO ₂ , alcohol foam or water spray. LARGE SPILL: Use DRY chemicals, CO ₂ , water spray or foam. Cool containing vessels with water jet in order to prevent pressure build-up, autoignition or explosion.
Protective Clothing (Fire)	Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.
Special Remarks on Fire Hazards	Vapor may travel considerable distance to source of ignition and flash back.
Special Remarks on Explosion Hazards	All electrical equipment in the area must be rated for flammable liquids. [Dispensing - Class I, Division 1; Storage - Class I, Division 2]

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Section 6. Accidental Release Measures

Small Spill and Leak	Absorb with an inert material and put the spilled material in an appropriate waste disposal container.
Large Spill and Leak	Flammable liquid, insoluble in water. Eliminate all ignition sources. Stop leak if without risk. Absorb with an inert material and put the spilled material in an appropriate waste disposal container. Do not use metal tools or equipment. Prevent entry into sewers, basements or confined areas; dike if needed.

Section 7. Handling and Storage

Handling	To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Eliminate all ignition sources (heaters, stoves, electric motors, open flames, pilot lights, etc.). After handling, always wash hands thoroughly with soap and water. Avoid breathing vapors or spray mists. Avoid contact with skin and eyes. Do not ingest.
Storage	Store in a dry, cool and well ventilated area. Flammable materials should be stored in a separate safety storage cabinet or room. Ground all equipment containing material. Keep out of the reach of children. WA 110 is classified as a Class 1B flammable liquid in accordance with OSHA storage guidelines.

Section 8. Exposure Controls/Personal Protection

Engineering Controls	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.
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Personal Protection	
<i>Eyes</i>	Splash goggles.
<i>Body</i>	Synthetic apron.
<i>Respiratory</i>	In case of insufficient ventilation, wear an approved (NIOSH) respirator with organic vapor cartridges with dust/mist pre-filter.
<i>Hands</i>	Gloves (Viton, nitrile, or neoprene).
<i>Feet</i>	No special precautions are necessary if used as intended.

Protective Clothing (Pictograms)



Personal Protection in Case of a Large Spill	In case of insufficient ventilation, wear an approved (NIOSH) respirator with organic vapor cartridges. Splash goggles or safety glasses. Gloves (Viton, nitrile, neoprene). Boots. Full suit.
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Product Name	Exposure Limits
Toluene	TWA: 100 ppm; STEL: 150 ppm OSHA (PEL) TWA: 50 ppm ACGIH (TLV); STEL: 150 ppm NIOSH
Acetone	TWA: 500 ppm; STEL: 1000 (ppm) [1997] TWA: 750 ppm; STEL: 1000 ppm; CEIL: 1000 ppm ACGIH (TLV) [1989] TWA: 500 ppm DFG MAK
Hexane isomers	TWA: 1000 ppm; STEL: 1250 ppm [1989] TWA: 1760 mg/m ³ ; CEIL: 3500 mg/m ³ ACGIH (TLV)
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Consult local authorities for acceptable exposure limits.

Section 9. Physical and Chemical Properties

Physical State and Appearance	Liquid.	Odor	Solvent-like. (Slight.)
Molecular Weight	Not applicable.	Taste	Not available.
Molecular Formula	Not applicable.	Color	Clear Colorless.
pH (1% Soln/Water)	Not available.		
Boiling/Condensation Point	55.6°C (132°F)		
Melting/Freezing Point	May start to solidify at -94.5°C (-138.1°F) based on data for: Toluene. Weighted average: -94.98°C (-139°F)		
Critical Temperature	The lowest known value is 234.2°C (453.6°F) (Hexane isomers).		
Specific Gravity	0.733 (Water = 1)		
Vapor Pressure	185 mm of Hg (@ 20°C)		
Vapor Density	The highest known value is 3.14 (Air = 1) (Toluene). Weighted average: 2.73 (Air = 1)		
Volatility	See "VOC" information below.		
Odor Threshold	The highest known value is 13 ppm (Acetone) Weighted average: 8.5 ppm		
Evaporation Rate	The highest known value is 7.7 (Acetone) Weighted average: 5.34 compared to Butyl acetate.		
VOC	V.O.C.'s: 6.1 lbs/gal; 727 g/Liter less water & exempt solvent. MAXIMUM VOC: 528 g/Liter (SCAQMD) HAP CONTENT: 57.03 mm/Hg composite partial pressure		
Viscosity	Not available.		
LogK_{ow}	Not available.		
Ionicity (in Water)	Not available.		
Dispersion Properties	Not available.		
Solubility	Insoluble in water.		
Physical Chemical Comments	Not available.		

Section 10. Stability and Reactivity

Stability and Reactivity	The product is stable.
Conditions of Instability	Keep away from sources of ignition.
Incompatibility with Various Substances	Reactive with oxidizing agents, reducing agents, organic materials, acids, alkalis.
Hazardous Decomposition Products	Products of Combustion include: carbon oxides (CO, CO ₂)
Hazardous Polymerization	Will not occur.

Section 11. Toxicological Information

Toxicity to Animals	WARNING: THE LC50 VALUES HEREUNDER ARE ESTIMATED ON THE BASIS OF A 4-HOUR EXPOSURE. Acute oral toxicity (LD50): 2600 mg/kg [Rat]. (Toluene). Acute dermal toxicity (LD50): 12210 mg/kg [Rabbit]. (Toluene). Acute toxicity of the vapor (LC50): 7523.6 ppm 4 hour(s) [Mouse]. (Toluene).
Chronic Effects on Humans	CARCINOGENIC EFFECTS: Not classifiable for human or animal by ACGIH, IARC, NTP. MUTAGENIC EFFECTS: Non-mutagenic. TERATOGENIC EFFECTS: Classified PROVEN for human [Toluene]. The substance is toxic to blood, kidneys, the nervous system, liver, central nervous system (CNS), lungs, upper respiratory tract, skin, respiratory tract, eyes. N-hexane is a neurotoxin.
Other Toxic Effects on Humans	Skin contact [irritant, permeator (absorbed through intact skin)]; eye contact (irritant).
Special Remarks on Toxicity to Animals	No additional remark.
Special Remarks on Chronic Effects on Humans	Inhalation of vapors may cause dizziness, an irregular heartbeat, narcosis, nausea or asphyxiation.
Special Remarks on Other Toxic Effects on Humans	Persons with pre-existing skin disorders may be more susceptible to the effects of solvents.


Section 12. Ecological Information

Ecotoxicity	Not available.
BOD5 and COD	Not available.
Biodegradable/OECD	Not available.
Mobility	Not available. Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
Toxicity of the Products of Biodegradation	The products of degradation are less toxic than the product itself.
Special Remarks on the Products of Biodegradation	No additional remark.

Section 13. Disposal Considerations

Waste Information	Spilled, contaminated, or waste material should be put into a suitable container and handled according to local, state/provincial, and federal regulations. Contact a qualified waste management company in your area for assistance. EMPTY CONTAINERS: Empty containers should be either reconditioned by CERTIFIED firms or properly disposed of by APPROVED firms. Disposal of containers should be in accordance with applicable laws and regulations. "Empty" drums should not be given to individuals. Serious accidents have resulted from the misuse of "emptied" containers. Residual vapors may in the container(s) may be explosive. Do not cut, weld, or braze these containers.
Waste Stream	Not available.
Consult your local or regional authorities.	

Section 14. Transport Information

DOT Classification	DOT CLASS: Flammable liquid.	
	Flammable liquids n.o.s. (contains toluene, acetone), 3 , UN1993, II	
Marine Pollutant	Not a Marine Pollutant.	
Special Provisions for Transport	1 Liter or less may use Limited Quantity exceptions (49CFR 173.150)	
ADR/RID Classification	Class 3: Flammable liquid A.	
IMO/IMDG Classification	IMDG CLASS 3: Flammable liquid.	
ICAO/IATA Classification	IATA CLASS 3: Flammable liquid.	

Section 15. Regulatory Information

HCS Classification	HCS CLASS: Flammable liquid IB having a flash point lower than 22.8°C (73°F) and a boiling point higher or equal to 37.8°C (100°F).
U.S. Federal Regulations	<p>TSCA 4(a) proposed test rules: Acetone; N-hexane TSCA 4(a) final test rules: N-hexane TSCA 8(b) inventory: Toluene; Acetone; N-hexane TSCA 8(d) H and S data reporting: Toluene: 10/04/92 TSCA 12(b) one time export: Acetone; N-hexane SARA 302/304/311/312 extremely hazardous substances: No products were found. SARA 302/304 emergency planning and notification: No products were found. SARA 302/304/311/312 hazardous chemicals: Toluene; Acetone; N-hexane SARA 311/312 MSDS distribution - chemical inventory - hazard identification: No products were found. SARA 313 toxic chemical notification and release reporting: Toluene: 1%; Acetone; N-hexane: 1% Clean water act (CWA) 307: Toluene Clean water act (CWA) 311: Toluene Clean air act (CAA) 112 accidental release prevention: No products were found. Clean air act (CAA) 112 regulated flammable substances: No products were found. Clean air act (CAA) 112 regulated toxic substances: No products were found.</p>
International Regulations	
EINECS	<p>Toluene (203-625-9) Acetone (200-662-2) n-Hexane and its isomers (203-777-6)</p>
DSCL (EEC)	<p>R11- Highly flammable. R20- Harmful by inhalation. R36/38- Irritating to eyes and skin. R51/53- Toxic to aquatic organisms. Contains substances which are dangerous for the aquatic environment.</p>
International Lists	<p>Australia: Toluene; Acetone; N-hexane China: Toluene; Acetone Germany water class: Toluene; N-hexane VCI WGK: Toluene Korea (TCCL): Acetone</p>

State Regulations Connecticut carcinogen reporting list.: Toluene
 Pennsylvania RTK: Toluene; Acetone; N-hexane
 Florida: Toluene; Acetone; N-hexane
 Minnesota: Toluene; Acetone; N-hexane
 Massachusetts RTK: Toluene; Acetone; N-hexane
 New Jersey: Toluene; Acetone; N-hexane
 California Prop. 65: This product contains the following ingredients which the State of California has found to cause reproductive harm, which would require a warning under the statute: Toluene

Section 16. Other Information

Label Requirements EXTREMELY FLAMMABLE LIQUID AND VAPOR, VAPOR MAY CAUSE FLASH FIRE. HARMFUL IF SWALLOWED OR INHALED.

Hazardous Material Information System (U.S.A.)

Health	*	2
Fire Hazard		3
Reactivity		0
Personal Protection		C

National Fire Protection Association (U.S.A.)



References -SAX, N.I. Dangerous Properties of Industrial Materials. Toronto, Van Nostrand Reinold, 6e ed. 1984.

GLOSSARY:

- ACGIH - American Conference of Governmental Industrial Hygienists
- ASTM - American Society for Testing and Materials
- ADR - Agreement on Dangerous Goods by Road (Europe)
- BOD5 - Biological Oxygen Demand in 5 days
- CAS - Chemical Abstract Services
- CEPA - Canadian Environmental Protection Act
- CERCLA - Comprehensive Environmental Response, Compensation and Liability Act
- CFR - Code of Federal Regulations
- DOT - Department of Transportation
- DSCL - Dangerous Substances Classification and Labeling (Europe)
- DSL - Domestic Substance List (Canada)
- EEC/EU - European Economic Community/European Union
- EINECS - European Inventory of Existing Commercial Chemical Substances
- HCS - Hazard Communication System
- HMIS - Hazardous Material Information System
- IARC - International Agency for Research on Cancer
- LD50/LC50 - Lethal Dose/Concentration kill 50%
- LDLo/LCLo - Lowest Published Lethal Dose/Concentration
- NFPA - National Fire Prevention Association
- NIOSH - National Institute for Occupational Safety & Health
- NTP - National Toxicology Program
- OSHA - Occupational Safety & Health Administration
- PEL - Permissible Exposure Limit
- RCRA - Resource Conservation and Recovery Act
- SARA - Superfund Amendments and Reorganization Act
- STEL - Short Term Exposure Limit (15 minutes)
- TDG - Transportation of Dangerous Goods (Canada)
- TLV-TWA - Threshold Limit Value-Time Weighted Average
- TSCA - Toxic Substances Control Act
- WHMIS - Workplace Hazardous Material Information System

Other Special Considerations TSCA (Toxic Substance Control Act): All components of this product are listed on the TSCA Inventory.
 EINECS: All components of this product are on the European Inventory of Existing Commercial Chemical Substances.

Validated by Wilsonart International Inc. on 06/05/2000.

Verified by Wilsonart International Inc..

Printed 06/05/2000.

CHEMTREC:
 800-424-9300 (USA)
 703-527-3887 (International)

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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.