Material Safety Data Sheet

Section 1. Chemical Product and Company Identification

Common Name	**Wilsonart(R)800/801**
Supplier	WILSONART INTERNATIONAL INC. P.O. BOX 6110 - 2400 Wilson Place, Temple, TX 76503 Information Phone: 800-433-3222 or 254-207-7000
Synonym	Also known as: Lokweld(R)800/801
Trade name	Wilsonart(R) 800/801
Material Uses	Adhesives for laminate.
Manufacturer	WILSONART INTERNATIONAL, INC. P.O. BOX 6110, Temple, TX 76503-6110 Information Phone: 254-207-7000 or 800-433-3222

Code	16405USA
MSDS#	16405
Validation Date	**06/05/2000**
Print Date	06/05/2000
Responsible Name	**Wilsonart International Inc.**

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
Hexane isomers	N/A	40-60	TWA: 1760 mg/m^3 CEIL: 3500 mg/m^3 ACGIH (TLV) TWA: 500 ppm STEL: 1000 ppm ACGIH (TLV)
Acetone	67-64-1	15-40	TWA: 750 ppm ACGIH (TLV) STEL: 1000 ppm ACGIH (TLV)
Toluene	108-88-3	5-15	TWA: 100 ppm STEL: 150 ppm OSHA (PEL) TWA: 50 ppm ACGIH (TLV)
N-hexane	110-54-3	1-5	TWA: 176 mg/m^3 ACGIH (TLV) TWA: 50 ppm ACGIH (TLV)

Section 3. Hazards Identification

Physical State and Appearance	Liquid.
Emergency Overview	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.
Routes of Entry	Absorbed through skin. Skin contact. Eye contact. Inhalation. Ingestion.
Potential Acute Health Effects	
Eyes	This product is an eye irritant.
Skin	Irritating to skin.
Inhalation	Inhalation of the vapors may cause dizziness, nausea, or anaesthetic effects. The product is a severe irritant for lungs and respiratory tract. Severe over-exposure can result in death.
Ingestion	Ingestion may cause severe gastric disturbances.
Potential Chronic Health Effects	Long term skin contact to solvents may produce defatting of the skin and dermatitis. Over-exposure by inhalation may cause respiratory irritation. Inhalation of vapors may cause dizziness, an irregular heartbeat, narcosis, nausea or asphyxiation. Severe over-exposure can result in death.
Medical Conditions Aggravated by Overexposure:	Preexisting eye and skin disorders.

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Overexposure /Signs/Symptoms	Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening. Inhalation of vapors may cause dizziness, an irregular heartbeat, narcosis, nausea or asphyxiation.

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. Wash contaminated clothing before reusing. If irritation occurs, seek medical attention.
Inhalation	Allow the victim to rest in a well ventilated area. Seek immediate medical attention.
Ingestion	DO NOT induce vomiting. Aspiration into the lungs may cause chemical pneumonitis. Have conscious person drink several glasses of water or milk. Seek immediate 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: -8.9°C (16°F). (Pensky-Martens.)
Flammable Limits	LOWER: 2% UPPER: 13%
Products of Combustion	These products are carbon oxides (CO, CO2).
Fire Hazards in Presence of Various Substances	Highly flammable in presence of open flames and sparks, of heat. Slightly 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. SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use alcohol foam, water spray or fog.
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. Container explosion may occur under fire conditions or when heated.
Special Remarks on Explosion Hazards	All electrical equipment in the spray area must be rated for flammable liquids. [Dispensing - Class I, Division 1 / Storage area rated Class I, Division 2] When dispensing, bond and ground all containers.

Section 6. Accidental Release Measures

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

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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. After handling, always wash hands thoroughly with soap and water.

Storage Flammable materials should be stored in a separate safety storage cabinet or room. Keep away from heat. Keep away from sources of ignition. Keep container tightly closed. Keep in a cool, well-ventilated place. Ground all equipment containing material. Keep out of reach of children.

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.

Personal Protection

Eyes Splash goggles or safety glasses with side shields.

Body Synthetic apron.

Respiratory In case of insufficient ventilation, wear an approved (NIOSH) respirator with organic vapor cartridges with dust/mist pre-filter.

Hands Gloves (Viton, nitrile, or neoprene).

Feet No special precautions are necessary if used as intended.

Protective Clothing (Pictograms)

Personal Protection in Case of a Large Spill A self contained breathing apparatus should be used to avoid inhalation of the product. Boots. Full suit. Splash goggles. Gloves (Viton, nitrile, or neoprene).

Product Name	Exposure Limits
Hexane isomers	TWA: 1760 mg/m^3 CEIL: 3500 mg/m^3 ACGIH (TLV) TWA: 500 ppm STEL: 1000 ppm ACGIH (TLV)
Acetone	TWA: 750 ppm ACGIH (TLV) STEL: 1000 ppm ACGIH (TLV)
Toluene	TWA: 100 ppm STEL: 150 ppm OSHA (PEL) TWA: 50 ppm ACGIH (TLV)
n-Hexane	TWA: 176 mg/m^3 ACGIH (TLV) TWA: 50 ppm ACGIH (TLV)

Consult local authorities for acceptable exposure limits.

Section 9. Physical and Chemical Properties

Physical State and Appearance	Liquid.
Molecular Weight	Not applicable.
Molecular Formula	Not applicable.
pH (1% Soln/Water)	Not available.
Boiling/Condensation Point	55.556°C (132°F)
Melting/Freezing Point	May start to solidify at -94.5°C (-138.1°F) based on data for: Toluene. Weighted average: -95.02°C (-139°F)
Critical Temperature	The lowest known value is 234.2°C (453.6°F) (Hexane isomers).

Odor	Strong.
Taste	Not available.
Color	Yellow to red.

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Specific Gravity	0.791 (Water = 1)
Vapor Pressure	185 mm of Hg (@ 20°C)
Vapor Density	The highest known value is 3.14 (Air = 1) (Toluene). Weighted average: 2.71 (Air = 1)
Volatility	81%
Odor Threshold	The highest known value is 13 ppm (Acetone) Weighted average: 9.41 ppm
Evaporation Rate	The highest known value is 7.7 (Acetone) Weighted average: 5.82compared to Butyl acetate.
VOC	V.O.C. Content (less water and exempt compounds): 5.02 lbs/gal.; 602 g/Liter. MAXIMUM VOC: 454 g/Liter (SCAQMD) VHAP CONTENT: 0.87lbs. VHAP/lbs. solid (if manufactured after 18 May 98) [HAP CONTENT: 1.52 lbs/lbs. solid (if manufactured before 18 May 98)]
Viscosity	200 cps (Brookfield Viscometer) 17.5 sec (Stormer Viscometer)
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, acids, alkalis.
Hazardous Decomposition Products	Products of Combustion include: carbon oxides (CO, CO2)
Hazardous Polymerization	Will not occur.

Section 11. Toxicological Information

Toxicity to Animals	Acute oral toxicity (LD50): 2600 mg/kg [Rat]. (Toluene). Acute dermal toxicity (LD50): 12210 mg/kg [Rabbit]. (Toluene).
Chronic Effects on Humans	**CARCINOGENIC EFFECTS**: Not classifiable for human or animal. **MUTAGENIC EFFECTS**: Classified none for human. **TERATOGENIC EFFECTS**: Classified PROVEN for human [Toluene]. **DEVELOPMENTAL TOXICITY**: Classified Development toxin [PROVEN] [Toluene]. Causes damage to the following organs: kidneys, liver, central nervous system (CNS). N-hexane is a neurotoxin. Toluene has been reported to have caused spontaneous abortion in women that intentionally concentrated and inhaled its vapors. Can cause CNS depression. Peripheral neuropathy (numbness in limbs).
Other Toxic Effects on Humans	No additional information.
Special Remarks on Toxicity to Animals	No additional remark.
Special Remarks on Chronic Effects on Humans	No additional information.

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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.
Toxicity of the Products of Biodegradation	Not available.
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	Class 3: Flammable liquid. Adhesives, 3, UN1133, II, Limited Quantity: 1 L
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	Class 3.2: Flammable liquid (Intermediate flashpoint group of liquids having a flashpoint of -18°C (0°F) up to, but not including, 23°C (73°F) c.c.).
ICAO/IATA Classification	Class 3: Flammable liquid.

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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

TSCA 4(a) proposed test rules: Acetone; N-hexane
TSCA 4(a) final test rules: N-hexane
TSCA 8(b) inventory: Acetone; Toluene; 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: Acetone; Toluene; N-hexane
SARA 311/312 MSDS distribution - chemical inventory - hazard identification: No products were found.
SARA 313 toxic chemical notification and release reporting: Acetone; Toluene: 1%; 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.

International Regulations

EINECS

Toluene (203-625-9)
Acetone (200-662-2)
n-Hexane and its isomers (203-777-6)

DSCL (EEC)

R11- Highly flammable.
R20- Harmful by inhalation.
R36/38- Irritating to eyes and skin.

International Lists

Australia:
Product(s): Acetone, Methyl alcohol, Toluene, N-hexane

State Regulations

Connecticut carcinogen reporting list.: Toluene
Pennsylvania RTK: Acetone; Toluene; N-hexane
Florida: Acetone; Toluene; N-hexane
Minnesota: Acetone; Toluene; N-hexane
Massachusetts RTK: Acetone; Toluene; N-hexane
New Jersey: Acetone; Toluene; 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 INHALED OR SWALLOWED. MAY CAUSE RESPIRATORY TRACT, EYE AND SKIN IRRITATION.

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)

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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 No additional information.

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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