



Consultants to the Sheet Metal Industry

MATERIAL SAFETY DATA SHEET

Section 1: Product Name: Ward Solvent Based Duct Sealer
Product Description (product use): Sealant

COMPANY INFORMATION

Ward Industries, Inc.
1661 Lebanon Church Road
Pittsburgh, PA 15236
Phone: 412-653-7777 or 800-466-9374
Fax: 412-653-8697

MSDS INFORMATION

Preparation Date: 2/03/98
Supersedes: N/A

Medical Emergency Phone Number: 1-888-853-1758
Transport Emergency Phone Number (CHEMTREC): 1-800-424-9300

Section 2: Composition/Information on Ingredients

This Material Safety Data Sheet is prepared to comply with the United States Occupational Safety and Health Administration (OSHA) Hazard Communication Standard (29 CFR 1910.1200) and the Canadian Workplace Hazardous Materials Information System (WHMIS). Unlisted ingredients are not "hazardous" per the OSHA standard and/or are not found on the WHMIS ingredient disclosure list.

Chemical/CAS Number	Percent	OSHA PEL	ACGIH TLV
n-Hexane (110-54-3)	10-30%	50 ppm	50 ppm
other isomers		500 ppm	500 ppm
LD50: 28,710 mg/kg (oral, rat)	LC50:	48,000 ppm/4th (rat)	
Vapor pressure, in mm Hg @ 20:	120		
ACGIH STEL:	1000 ppm (for isomers)		
Toluene (108-88-3)	5-10%	100 ppm	50 ppm
LD50: 5000 mg/kg (oral, rat)	LC50:	7524 ppm/4th (rat)	
Vapor pressure, in mm Hg @ 20 C:	24		
OSHA, ACGIG STEL:	150 ppm (Skin)		

Section 2: Composition/Information on Ingredients (continue)

Chemical/CAS Number	Percent	OSHA PEL	ACGIH TLV
VM&P Naphtha (8032-32-4) LD50: No data found LC50: 3400 pmm/4h (rat) Vapor pressure, in mm Hg @ 20 C: 15 OSHA, ACGIH STEL: 400 ppm	10-30%	300 ppm	300 ppm
Xylene (mixed isomers) (1330-20-7) LD50: 5 gm/kg (oral, rat) LC50: 4550 ppm/4th (rat) Vapor pressure, in mm Hg @ 20 C: 6 OSHA, ACGIH STEL: 150 ppm (Skin)	1-5%	100 ppm	100 ppm
Methylcyclopentane (96-37-7) LD50: No data found LC50: No data found	1-5%	Not estab.	Not estab.

Skin absorption may potentially contribute to the overall exposure to this material. Appropriate measures should be taken to prevent absorption so that the TLV is not invalidated.

See Section 16 for additional information.

Section 3: Hazards Identification

EMERGENCY OVERVIEW

Flammable

Eye irritant

Contact will dry and defat the skin

Vapors harmful

Harmful if swallowed

May cause adverse reproductive effects, based on tests with laboratory animals.

POTENTIAL HEALTH EFFECTS

Eyes: Contact with the product or high vapor levels will cause irritation

Skin: Liquid contact will dry and defat the skin. Prolonged or repeated contact may cause irritation and sensitization.

Inhalation: Overexposure to vapors in poorly ventilated areas will cause irritation of the nose, throat and respiratory tract and may cause dizziness, headaches, nausea or unconsciousness.

Ingestion: Harmful if swallowed.

Chronic: Long-term overexposure to solvents may cause liver and kidney damage. Some solvents may cause damage to the nervous system.

n-Hexane has been demonstrated to cause peripheral nerve damage in overexposed workers. Symptoms include loss of feeling and weakness in the hands and feet and loss of manual dexterity.

Overexposure to toluene may cause female and male reproductive disorders, based on tests with laboratory animals. Current exposure guidelines are expected to protect from these effects. Overexposure to xylene may cause female and male reproductive disorders, based on tests with laboratory animals.

REGULATED CARCINOGEN STATUS:

This product does not contain regulated levels of NTP, IARC, ACGIH or OSHA listed carcinogens.

Existing Health Conditions affected by Exposure: No known effects on other illnesses.

Section 4: First Aid Measures

If in eye: Flush immediately with large amounts of water for at least 15 minutes. Call a physician.

If on skin: Wash affected area with soap and water. Launder contaminated clothing before reuse.

If vapors inhaled: Remove from exposure. Restore breathing if necessary. Keep warm and quiet. Call a physician.

If ingested: If person can swallow, give one glass of water or milk. Do not induce vomiting. Get immediate medical attention. Never give anything by mouth to an unconscious person.

Section 5: Fire Fighting Measures

Flash Point/Method: 20 degrees F Pensky-Martens, -7 degrees C

Upper Explosive Limit/Lower Explosive Limit: Not established

Autoignition Temperature: Not established

Appropriate Extinguishers: Use water spray, foam, dry chemical or carbon dioxide.

Special Fire Fighting Procedures: Persons exposed to products of combustion should wear self-contained breathing apparatus and full protective equipment.

Unusual fire and Explosion Hazards: There is the possibility of pressure buildup in closed containers when heated. Water spray may be used to cool the containers.

Solvent vapors are heavier than air and may travel along the ground or be moved by ventilation and ignited by heat, pilot lights, other flames and ignition sources at locations distant from the material handling point. Never use welding or cutting torch on or near drum (even empty) because product (even just residue) can ignite explosively.

Hazardous Combustion Product: Incomplete combustion can yield low molecular weight hydrocarbons, carbon monoxide.

Section 6: Accidental Release Measures

Spill or Leak Procedures: Remove all sources of ignition. Ventilate area. Avoid breathing

Section 6: Accidental Release Measures (continue)

vapors. Dike and contain spill with inert absorbent and transfer to container for disposal. Use non-sparking tools. Keep spill out of sewers.

Section 7: Handling and Storage

HANDLING INFORMATION

Keep away from heat, sparks and flame
Avoid breathing vapors
Use only with adequate ventilation
Avoid contact with eyes, skin and clothing
Wash thoroughly after handling
Keep container closed
Emptied container retains vapor and product residue
Observe all labeled precautions until container is cleaned
DO NOT CUT OR WELD ON OR NEAR THIS CONTAINER

STORAGE INFORMATION

Consult the Technical Data Sheet for specific storage instructions.

Section 8: Exposure Controls/Personal Protection

Eye Protection: Wear safety glasses to reduce the potential for eye contact; chemical safety goggles are appropriate if splashing or dusting is likely. Have eye washes available where eye contact can occur.

Skin Protection: Prevent contact by using rubber gloves and appropriate protective clothing. Launder contaminated clothing before reuse.

Respiratory Protection: Use NIOSH approved supplied air respirator if conditions warrant.

Ventilation: Local exhaust ventilation preferred. Provide ventilation to control contaminant levels below airborne exposure limits.

Section 9: Physical and Chemical Properties

Physical State:	Liquid
Color:	Gray
Odor:	Pungent, solvent
Weight per Gallon:	7.3 lbs.
Specific Gravity:	0.88

Section 9: Physical and Chemical Properties (continue)

% Solids by Weight:	45
pH:	Not applicable
Boiling Range:	Greater than 156 F (69 C)
Freezing/Melting Point:	Not applicable
Vapor Pressure:	Not established
Vapor Density:	Not established
Evaporation Rate:	Not established
Water/Oil Partition Coefficient:	Not established
VOC, less water:	504.8 g VOC/liter of material, less water and exempt solvents (VOC theoretically determined using EPA Publication 450/3-84-019.)

Section 10: Stability and Reactivity Data

Stability: stable
Incompatibility: Not established
Hazardous Decomposition: Not established
Hazard Polymerization: Will not occur

Section 11: Toxicological Information

No data available

Section 12: Ecological Information

No data available

Section 13: Disposal Considerations

This product meets the definition of hazardous waste under the U.S. EPA Hazardous Waste Regulations 40 CFR 261. It is ignitable waste class D001. Disposal via incineration is recommended. Consult your state, local or provincial authorities for more restrictive requirements.

Section 14: Transportation Information

UNITED STATES DEPARTMENT OF TRANSPORTATION (DOT)

DOT Proper Shipping Name:	Adhesive
DOT Hazard Class/I.D. Code:	3, UN-1133
DOT Label:	Flammable Liquid
DOT Packaging Group:	II (55 GAL)III (5 GAL)
Marine Pollutants:	N

Section 14: Transportation Information (continue)

UNITED STATES DEPARTMENT OF TRANSPORTATION (DOT)

It is our opinion that the information provided here may be used to transport this product in compliance with Canadian Transportation of Dangerous Goods.

INTERNATIONAL TRANSPORTATION

IATA Proper Shipping Name: Adhesive
IATA Hazard Class: 3
IATA I.D. code: UN-1133
IATA Label: Flammable Liquid
IATA Packaging Group: II (55 GAL)III(5 GAL)

Section 15: Regulatory Information

FEDERAL

Toxic Substances Control Act (TSCA)

Section 4 - Test Rule

This product contains the following chemical substance (s) that is (are) subject to a Section 4 Test Rule:

110-54-3	n-Hexane
96037-7	Methylcyclopentane
110-82-7	Cyclohexane

Section 8 (b) - Inventory Status

This product is in compliance with the Toxic Substances Control Act's Inventory requirements.

Section 12 (b) - Export Notice Requirements

This product contains a chemical substance that is currently on the EPA's Section 12 (b) Export List. Within seven days of entering into a contract to export and certainly no later than the day of export, the agent of export must notify the EPA of their intent.

Contact the company TSCA Compliance Manager at 612-415-5858 for the identity of the Section 12 (b) chemical (s).

Section 15: Regulatory Information (continue)

SARA TITLE III

Section 313: This product contains the following toxic chemical (s) subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and 40 CFR part 372:

Chemical Name	CAS Number	Percent
n-Hexane	110-54-3	10-30%
Toluene	108-88-3	5-10%
Xylene	1330-20-7	1-5%

STATE REGULATIONS

California Proposition 65: This product contains chemical (s) known to the state of California to cause cancer (c) or reproductive (r) damage.

<0,0001% Benzene (c) listed February 27, 1997	71-43-2
<0.0078% Formaldehyde (c) listed January 1, 1988	50-00-0
<0.0009% Crystalline silica (c) listed October 1, 1988	
<6.1890% Toluene (r) listed January 1, 1991	108-88-3

WHMIS IDENTIFICATION/OTHER INTERNATIONAL REGULATIONS

B2, D2A, D2B

Section 16: Additional Information

Drums of this material should be grounded when pouring.

This product contains the following substance (s) identified by OSHA, WHMIS, or the ACGIH as hazardous. During normal use, the material will not present an exposure risk. Once the product has reached its final state and is abraded or disturbed, dusting and exposure may occur.

0.1-1.0% Calcium carbonate (1317-65-3)
Exposure limit total dust 15 mg/M3 (OSHA) 10 mg/M# (ACGIH)
Exposure limit respirable dust 5 mg/M3 (ACGIH)
LD50: No data found LC: No data found

Section 16: Additional Information

HMIS RATING

Health-2

Flammability-3

Reactivity-0

See SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for personal protective equipment recommendations.

The information and recommendations set forth herein are believed to be accurate. Because some of the information is derived from information provided to Ward Industries from its suppliers, and because Ward Industries has no control over the conditions of handling and use, Ward Industries makes no warranty, expressed or implied, regarding the accuracy of the data or the results to be obtained from the use thereof. The information is supplied solely for your information and consideration, and Ward Industries assumes no responsibility for use or reliance thereon. It is the responsibility of the user of Ward Industries products to comply with all applicable federal, state and local laws and regulations.

