

SECTION 1 - PRODUCT IDENTIFICATION		
Manufacturer/Supplier identifier:  The W.W. Henry Company 400 Ardex Park Drive Aliquippa, PA, U.S.A., 15001 Tel: (724) 203-8499		MATERIAL SAFETY DATA SHEET Use in case of emergency only: CHEM-TEL – 1-800-255-3924 OR 1-813-248-0585 (call collect) Visit our Website: http://www.wwhenry.com
Product identifier/Trade name: <i>Henry 444 FRP Panel Adhesive</i>		HMIS Hazard Index: HEALTH = *1 FLAMMABILITY = 1 REACTIVITY = 0 4 = Severe 3 = Serious 2 = Moderate 1 = Slight 0 = Minimal * = Chronic WHMIS Classification: D2A – Very Toxic material with other toxic effects
CHEMICAL NAME Not Applicable	CHEMICAL FAMILY Not available.	CHEMICAL FORMULA Not Applicable
TRADE NAME AND SYNONYMS Henry® 444	MOLECULAR WEIGHT Not Applicable	MATERIAL USE Filled, water-dispersed latex adhesive.

SECTION 2 - CHEMICAL COMPOSITION / HAZARDOUS INGREDIENTS						
Hazardous Ingredients	C.A.S. Numbers	% (weight)	OSHA PEL		ACGIH TLV	
			TWA	STEL	TWA	STEL
Solvent naphtha (petroleum), light aliphatic	64742-89-8	1 - 3	*300 ppm	*400 ppm	*300 ppm	N/Av
Toluene	108-88-3	0.1 – 1.0	200 ppm	300 ppm (ceiling)	50 ppm (skin)	N/Av
*Note: The OSHA PEL's listed above for Solvent naphtha (petroleum), light aliphatic are final rule / vacated values, and are for 'VM&P Naphtha'. The ACGIH TLV listed above for Solvent naphtha (petroleum), light aliphatic is for 'VM&P Naphtha'.						
This material is classified as hazardous under OSHA regulations (29CFR 1910.1200).						

SECTION 3 - HAZARDS IDENTIFICATION
Emergency Overview Off white, creamy paste with mild solvent odor. CAUTION! May be harmful if inhaled or swallowed. Causes headache, drowsiness or other effects to the central nervous system. May cause respiratory tract irritation. Prolonged or repeated contact may cause skin dryness and irritation. Possible developmental hazard - Contains material that may cause fetotoxic effects, based on animal data.
POTENTIAL HEALTH EFFECTS:
Primary entry route(s): Skin, eyes, ingestion and inhalation.
Target organs: Eyes, skin, respiratory system, central nervous system, digestive system.
Effects of short-term (acute) exposure: <u>Inhalation:</u> May cause irritation to the nose, throat and respiratory tract. Inhalation of higher concentrations could cause dizziness, drowsiness, incoordination and other central nervous system effects. <u>Skin:</u> Direct skin contact may cause mild irritation. <u>Eye:</u> Direct eye contact may cause mild irritation.
<u>Ingestion:</u> May cause irritation of the mouth, throat and stomach. Product may be absorbed into the body and cause symptoms similar to those listed for inhalation. This product may present an aspiration hazard if ingested in large amounts. Aspiration into the lungs could cause life-threatening lung injury.
Effects of long-term (chronic) exposure: Prolonged or repeated skin contact may cause more pronounced irritation, drying and cracking of the skin (dermatitis).

SECTION 3 - HAZARDS IDENTIFICATION Continued		
Conditions aggravated by exposure: Pre-existing skin, eye and respiratory disorders.		Carcinogenic status: See TOXICOLOGICAL INFORMATION, Section 11.
Additional health hazards: Possible developmental hazard. For further information, see TOXICOLOGICAL INFORMATION, Section 11.		Potential environmental effects: See ECOLOGICAL INFORMATION (Section 12).
SECTION 4 - FIRST AID MEASURES		
Inhalation: If inhaled, remove victim to fresh air. If breathing has stopped, begin artificial respiration. Seek medical attention.		
Skin contact: Wash skin with mild soap and plenty of water, while removing contaminated clothing. Obtain medical attention if irritation persists.		
Eye contact: Flush eyes thoroughly with running water for at least 15 minutes. Obtain medical attention if irritation persists.		
Ingestion: Do not induce vomiting. Never give anything by mouth if patient is unconscious. Seek medical attention.		
SECTION 5 - FIRE FIGHTING MEASURES		
Fire hazards/conditions of flammability: Product is not flammable under normal conditions. However, this material may be ignited by extreme heat and flame. Vapors are heavier than air and collect in low-lying areas. Closed containers may rupture if exposed to excess heat or flame, due to a build-up of internal pressure.		
Flammability classification (OSHA 29 CFR 1910.1200): Class IIIB Combustible Liquid.		
Flash point (Method): > 93.3°C / 200°F (Setaflash closed tester)	Lower flammable limit (% by volume): N/Av	Upper flammable limit (% by volume): N/Av
Auto-ignition temperature: N/Av	Hazardous combustion products: Carbon oxides, reactive hydrocarbons, aldehydes and other toxic vapors and gases that are common to thermal degradation of organic compounds.	
Sensitivity to mechanical impact: N/Av	Sensitivity to static discharge: N/Av.	
Suitable extinguishing media: Carbon dioxide, dry chemical powder, appropriate foam or water fog. Do not use water jet.		
Special fire-fighting procedures/equipment: Firefighters should wear proper chemically protective equipment and self-contained breathing apparatus. Move containers from fire area if it can be done without risk. Use water to cool fire exposed containers. After fires have been extinguished, carefully clean all equipment and surfaces exposed to fumes. Avoid spreading burning liquid with water spray used for cooling purposes.		
SECTION 6 - ACCIDENTAL RELEASE MEASURES		
Personal precautions: Wear personal protective equipment during cleanup. Restrict access to area until completion of clean-up. All persons dealing with clean-up should wear the appropriate protective equipment, especially where exposure to vapor, dust or fume is possible. Refer to Section 8, EXPOSURE CONTROLS AND PERSONAL PROTECTION, for additional information on acceptable personal protective equipment.		
Spill response/Cleanup: Ventilate area of spill or release. Eliminate all sources of ignition. Contain material, preventing it from entering sewer lines or waterways. Use inert, non-combustible absorbents to assist the pick up of material. Scrape up product and place it into a container for disposal. Residual of product, while still wet, can be cleaned up with warm soapy water. Notify the appropriate authorities as required.		
Environmental precautions: Do not allow material to be discharged into the atmosphere or into sewers or ground water.		
Special spill response procedures: If a spill/release in excess of EPA reportable quantity is made into the environment, immediately notify the national response center in the United States (phone: 1-800-424-8002). DOT/CERCLA Reportable quantity (RQ): Toluene (1000 lbs).		
SECTION 7 - HANDLING AND STORAGE		
Safe handling procedures: Wear suitable protective equipment. Use in a well-ventilated area. Training the workers on the potential health hazards associated with product vapor, dust or fume is important. Secondary inhalation exposures could occur when cleaning equipment, or when removing or laundering the clothing. Avoid breathing vapors, fumes or dust. Avoid contact with eyes, skin and clothing. Keep away from heat and flame. Keep away from oxidizing agents and other incompatibles. Keep container tightly closed when not in use. Wash thoroughly after handling.		

SECTION 7 - HANDLING AND STORAGE Continued**Storage requirements:**

Store in a cool (temperature below 32.2°C / 90°F), dry, well-ventilated area. Do not store in direct sunlight. No smoking in the area. Protect from damage.

SECTION 8 - EXPOSURE CONTROLS AND PERSONAL PROTECTION**Engineering controls:**

Use in well-ventilated area. Use natural cross-ventilation, local (mechanical) pick-up, and/or general area ventilation to meet TLV requirements. Keep in mind that the ventilation pattern must remove the heavier than air solvent vapors from the lower levels of work spaces.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection: If airborne concentrations are above the permissible exposure limit or are not known, use NIOSH-approved respirators approved for organic vapors.

Skin protection and other protective equipment: Impervious gloves appropriate to the material if skin contact with product is expected. Advice should be sought from glove suppliers. Where exposure to product is possible use protective clothing. An eyewash fountain and safety shower should be made available in the immediate working area.

Eye / face protection: Wear safety glasses or goggles to prevent any product from entering the eyes.

Permissible exposure levels:

For individual ingredient exposure levels, see Section 2.

General Hygiene Considerations:

Avoid contact with eyes, skin and clothing. Avoid breathing vapors/dusts/fumes. Never eat, drink, or smoke in work areas. Clean all equipment and clothing at end of each work shift.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES**Physical state:**

Paste

Odor and appearance:

Off white, creamy paste with mild solvent odor.

Odor threshold:

N/Av

Specific gravity (water = 1):

1.386

Vapor pressure:

18 mmHg @ 20°C / 68°F

Vapor density (Air=1):

< 1

Evaporation rate (n-Butyl acetate = 1):

< 1

Boiling point:

100°C / 212°F

Melting/freezing point:

N/Av

Solubility in water:

Miscible.

% volatile by volume:

N/Av

pH:

9.3 ± 1

Coefficient of oil/water distribution:

N/Av

Viscosity:

N/Av

% volatile by weight (30 min. @ 135°C/275°F):

27.0

Weight/Gallon:

11.54 lbs (water = 8.3)

Volatile Organic Content (VOC):

50 g/L calculated at 21°C / 70°F, SCAQMD

SECTION 10 – REACTIVITY AND STABILITY DATA**Stability and reactivity:**

Stable under the recommended storage and handling conditions prescribed.

Polymerization:

Hazardous polymerization will not occur.

Conditions to avoid:

Temperatures above 32.2°C / 90°F.

Materials to avoid:

Strong oxidizing agents.

Hazardous decomposition products:

None known. Refer to 'Hazardous combustion products', Section 5.

SECTION 11 - TOXICOLOGICAL INFORMATION**Toxicological data:**

There is no available data for the product itself. See below for individual ingredient acute toxicity data.

Ingredients:

Solvent naphtha (petroleum), light aliphatic

Toluene

LD₅₀ (route, species):

Not available

2600 - 7500 mg/kg (oral, rat);
12,225 mg/kg (dermal, rabbit)

LC₅₀ (species):

Not available

7350 ppm / 4 hrs. (inhalation, rat)

SECTION 11 - TOXICOLOGICAL INFORMATION Continued			
Carcinogenicity: No ingredient classified as carcinogenic to humans by IARC, NTP, OSHA or ACGIH.			
Teratogenicity, mutagenicity, other reproductive effects: This product contains Toluene. Toluene is a developmental hazard. It could cause fetotoxic effects, based on animal data.			
Sensitization to material: Not expected to cause respiratory or skin sensitization reactions.	Synergistic materials: N/Av		
Irritancy of material: Mild irritant.			
For more details, refer to Section 3.			
SECTION 12 - ECOLOGICAL INFORMATION			
Environmental effects: The product should not be allowed to enter drains or water courses, or be deposited where it can affect ground or surface waters. Do not discharge product unmonitored into the environment.			
Important environmental characteristics: N/Av			
Aquatic toxicity: N/Av			
SECTION 13 - WASTE DISPOSAL			
Handling and storage conditions for disposal: Handle according to recommendations listed in Section 7.			
Methods of disposal: Dispose of in sealed containers in accordance with all applicable government regulations. Dispose in accordance with all applicable federal, provincial, state and local regulations. Contact your local, state or federal environmental agency for specific rules.			
RCRA: Toluene, when considered on its own, is assigned RCRA Code U220. If this product, as supplied, becomes a waste, it may meet the criteria of a hazardous waste as defined under RCRA, Title 40 CFR 261. Waste classification should be determined by the end user of the product. For disposal of unused or waste material, check with local, state and federal environmental agencies.			
SECTION 14 - TRANSPORTATION INFORMATION			
Transportation of Dangerous Goods Regulations (TDGR) Shipping Information: This product is not regulated for transportation by ground within Canada.			
US DOT 49 CFR Shipping information: This product is not regulated for transportation by ground within the continental United States.			
SECTION 15 - REGULATORY INFORMATION			
In Canada: WHMIS information: This product is a WHMIS Controlled Product. It meets one or more of the criteria for a controlled product provided in Part IV of the Controlled Products Regulations (CPR). Refer to Section 1 for a WHMIS Classification for this product. This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and this MSDS contains all the information required by the CPR. CEPA information: All ingredients are listed on the DSL.			
In U.S.A.: TSCA information: All ingredients are listed on the TSCA inventory. DOT/CECLA Reportable Quantity (RQ): Toluene (1000 lbs) SARA TITLE III: <i>Sec. 313, Toxic Chemicals Notification, 40 CFR 372:</i> This material is not subject to SARA notification requirements, since it does not contain any Toxic Chemical constituents above <i>de minimus</i> concentrations. California Proposition 65: This product contains a chemical (Toluene) known to the State of California to cause developmental harm. New Jersey Hazardous Substance Lists: This product contains the following substances required to be disclosed on product labelling:			
	<u>Chemical Name</u>	<u>CAS #</u>	<u>New Jersey Hazardous Substance</u>
	Solvent naphtha (petroleum), light aliphatic	64742-89-8	No
	Toluene	108-88-3	Yes

SECTION 16 - OTHER INFORMATION		
Prepared by: The W.W. Henry Company	Telephone number: (724) 203-8499	Preparation date: February 20, 2007
References: <ol style="list-style-type: none"> 1. ACGIH, Threshold Limit Values and Biological Exposure Indices for 2006. 2. International Agency for Research on Cancer Monographs, searched February 2007. 3. Canadian Centre for Occupational Health and Safety, CCIInfoWeb databases, 2007 (Chempendium and RTECs). 4. Material Safety Data Sheet from manufacturer. 5. US EPA Title III List of Lists – January 27, 2005 version. 6. California Proposition 65 List – December 8, 2006 version. 		
Abbreviations: ACGIH = American Conference of Governmental Industrial Hygienists CAS = Chemical Abstract Service CERCLA = Comprehensive Environmental Response, Compensation, and Liability Act of 1980 CFR = Code of Federal Regulations (U.S.A.) DOT = Department of Transport (U.S.A.) DSL = Domestic Substance List EPA = Environmental Protection Agency (U.S.A.) IARC = International Agency for Research on Cancer N/Av = Not available. N/Ap = Not applicable NIOSH = National Institute for Occupational Safety and Health NTP = National Toxicology Program (U.S.A.) OSHA = Occupational Safety and Health Administration (U.S.A.) PEL = Permissible Exposure Limit RCRA = Resource Conservation and Recovery Act SARA = Superfund Amendments & Reauthorization Act STEL = Short-term Exposure Limit TLV = Threshold Limit Value TSCA = Toxic Substances Control Act TWA = Time Weighted Average WHMIS = Workplace Hazardous Materials Information System		
<p>The information presented herein is supplied as a guide to those who handle or use this product and has been prepared in good faith by technically knowledgeable personnel. It is not intended to be all - inclusive. The manner and conditions of use and handling may involve other and additional considerations. Safe work practices must be employed when working with any materials. It is important that the end user makes a determination regarding the adequacy of the safety procedures employed during the use of this product.</p> <p>No warranty of any kind is given or implied. W.W. Henry Company will not be liable for any damages, losses, injuries or consequential damages which may result from the use or reliance on any information contained herein. This Material Safety Data Sheet is valid for three (3) years.</p>		

End of Document