Vacuum Pressing Systems Inc

MSDS: 0163

Print Date: 07/19/2012

MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product Name: Veneer Tamer

Product Codes: VT-C

VACUUM PRESSING SYSTEMS INC., 553 RIVER ROAD, BRUNSWICK, ME, USA For Product Information call 207-725-0935

EMERGENCY PHONE (24 hours/day) - For emergency involving spill, leak, fire, Or accident call: 703-527-3887 or 800-424-9300 (CHEMTREC)

2. Composition/Information on Ingredients

Component CAS# Amount

Diethylene Glycol Monoethyl 111-90-0 > 99.0 - < 100.0%

Ether

3. Hazards Identification

EMERGENCY OVERVIEW

Appearance/Odor: Colorless liquid with mild odor.

Hazards of product: CAUTION!

Combustible liquid and vapor. May cause eye irritation. May be harmful if swallowed. Isolate

area

POTENTIAL HEALTH EFFECTS

Eye Contact: May cause moderate eye irritation. Corneal injury is unlikely. Skin Contact: Prolonged exposure not likely to cause significant skin irritation.

Skin Absorption: Prolonged skin contact is unlikely to result in absorption of harmful amounts. Ingestion: Low toxicity if swallowed. Small amounts swallowed incidentally as a result of normal handling operations are not likely to cause injury; however, swallowing larger amounts

may cause injury. Inhalation: No adverse effects are anticipated from single exposure to vapor.

Effects of Repeated Exposure: In animals, effects have been reported on the following organs: Blood. May cause central nervous system effects.

Reproductive Effects: Studies in laboratory animals indicate that diethylene glycol monoethyl ether (DEGEE) is not a reproductive toxicant even when given in large amounts (a few percent in the drinking water). However, at the highest doses, it caused some toxic effects in offspring of treated animals; increased liver weight, decreased brain weight, reduced sperm motility.

Medical Conditions Aggravated by Exposure: Repeated excessive exposure may aggravate preexisting liver and kidney disease.

Emergency Personnel Protection: First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists refer to Section 8 for specific personal protective equipment. See Section 11 for toxicological information and additional information about potential health effects. This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR1910.1200).

Potential Environmental Effects: See Section 12 for more information)

4. First Aid Measures

Eye Contact: Flush eyes thoroughly with water for several minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist.

Skin Contact: Wash skin with plenty of water.

Inhalation: Move person to fresh air; if effects occur, consult a physician.

Ingestion: If swallowed, seek medical attention. Do not induce vomiting unless directed to do so by medical personnel.

Notes to Physician: There is no specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

5. Fire Fighting Measures

Extinguishing Media: Water fog or fine spray. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers. Foam. Alcohol resistant foams (ATC type) are preferred. General purpose synthetic foams (including AFFF) or protein foams may function, but will be less effective.

Fire Fighting Procedures: Keep people away. Isolate fire and deny unnecessary entry. Use water spray to cool fire exposed containers and fire affected zone until fire is out and danger of reignition has passed. Fight fire from protected location or safe distance. Consider the use of unmanned hose holders or monitor nozzles. Immediately withdraw all personnel from the ar-

ea in case of rising sound from venting safety device or discoloration of the container. Burning liquids may be extinguished by dilution with water. Do not use direct water stream. May spread fire. Move container from fire area if this is possible without hazard. Burning liquids may be moved by flushing with water to protect personnel and minimize property damage.

Special Protective Equipment for Firefighters: Wear positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves.) If protective equipment is not available or not used, fight fire from a protected location or safe distance.

Unusual Fire and Explosion Hazards: Container may rupture from gas generation in a fire situation. Violent steam generation or eruption may occur upon application of direct water stream to hot liquids.

Hazardous Combustion Products: During a fire, smoke may contain the original material in addition to combustion products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: Carbon monoxide. Carbon dioxide.

6. Accidental Release Measures

Personal Precautions: Isolate area. Refer to Section 7, Handling, for additional precautionary measures. Keep unnecessary and unprotected personnel from entering the area. Keep upwind of spill. Ventilate area of leak or spill. No smoking in area. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection.

Environmental Precautions: Prevent from entering into soil, ditches, sewers, waterways and/or ground water. See Section 12, Ecological information

Steps to be taken if Material is Released or Spilled: Small spills: Absorb with materials such as: Sand. Vermiculite. Collect in suitable and properly labeled containers.

Large spills: Contain spilled material if possible. Pump into suitable and properly labeled containers. See Section 13, Disposal Considerations, for additional information.

7. Handling and Storage

General Handling: Keep away from heat, sparks and flame. Avoid contact with eyes. Do not swallow. Avoid breathing vapor. Wash thoroughly after handling. Use with adequate ventilation

Keep container closed. Containers, even those that have been emptied, can contain vapors. Do not cut, drill, grind, weld, or perform similar operations on or near empty containers. See Section 8, EXPOSURE

CONTROLS AND PERSONAL PROTECTION.

Other Precautions: Spills of these organic materials on hot fibrous insulations may lead to lowering of the autoignition temperatures possibly resulting in spontaneous combustion.

Storage

Store in the following material(s): Carbon steel. Stainless Steel. Phenolic lined steel drums. Do not store in: Aluminum. Copper. Galvanized iron. Galvanized steel. See Section 10 for more specific information.

8. Exposure Controls/Personal Protection

Exposure Limits

Component	List	Type	Value
Diethylene Glycol Monoethyl Ether	Dow IHG	TWA	25 ppm
	WEEL	TWA	$140 \text{ mg/m}^3 25 \text{ ppm}$

Personal Protection

Eye/Face Protection: Use safety glasses. Where contact with this material is likely, chemical goggles are recommended because eye contact may cause discomfort even though it is unlikely to cause injury.

Skin Protection: No precautions other than clean body-covering clothing should be needed. Hand protection: Chemical protective gloves should not be needed when handling this material. Consistent with general hygienic practice for any material, skin contact should be minimized. Respiratory Protection: Atmospheric levels should be maintained below the exposure guideline. When respiratory protection is required for certain operations, use an approved airpurifying respirator. The

following should be effective types of air-purifying respirators: Organic vapor cartridge. Ingestion: Use good personal hygiene. Do not consume or store food in the work area. Wash hands before smoking or eating.

Engineering Controls

Ventilation: Provide general and/or local exhaust ventilation to control airborne levels below the exposure guidelines.

Engineering Controls: The following exposure control techniques may be used to effectively minimize employee exposure: local exhaust ventilation, enclosed system design, process isolation and remote control in combination with appropriate use of personal protective equipment and prudent work practices. These techniques may not necessarily address all issues pertaining to your operations. We, therefore, recommend that you consult with experts of your choice to determine whether or not your programs are adequate. If airborne contaminants are generated when the material is heated or handled, sufficient ventilation in volume and air flow patterns should be provided to keep air contaminant concentration levels below acceptable criteria.

9. Physical and Chemical Properties

Color: Colorless

Odor Threshold: No test data available. Physical State: Liquid.

pH: No test data available.

Freezing Point: -43°C (-45°F) Literature Melting Point: Not applicable to liquids.

Boiling Point (760 mm Hg): 201°C (394°F) Literature

Flash Point-Closed Cup: 90°C (194°F) Setaflash Closed Cup ASTMD3828 Flammability

(solid, gas) No

Evaporation Rate (Butyl Acetate=1): 0.01 Flammable Limits in Air:

Lower 1.2%(V) Literature. Upper 23.5%(V) Literature.

Vapor Pressure: 0.09 mmHg @ 20°C Literature Vapor Density (air=1): No test data available.

Specific Gravity (H20=1): 0.990 20°C/20°C Literature

Solubility in Water (by weight): 100% @ 20°C Literature Molecular Weight: 134 g/mol

Decomposition No test data available. Temperature

Partition Coefficient, n- -0.54 Measured octanol/water (log Pow)

Auto-ignition Temperature: 201°C (394 °F) Literature

Dynamic Viscosity: 4.5 mPa.s @ 25°C Literature Kinematic Viscosity: No test data available.

10. Stability and Reactivity

Stability/Instability

Thermally stable at typical use temperatures.

Conditions to Avoid: Do not distill to dryness. Product can oxidize at elevated temperatures.

Generation of gas during decomposition can cause pressure in closed systems.

Incompatible Materials: Avoid contact with: Strong acids. Strong bases. Strong oxidizers.

Hazardous polymerization will not occur

Thermal Decomposition

Decomposition products can include and are not limited to: Aldehydes. Ketones. Organic acids.

11. Toxicological Information

Acute Toxicity Ingestion

LD50, Rat 1,920 - 9,050 mg/kg

LD50 Rabbit 3,620 mg/kg

LD50 Guinea pig 3,670 - 3,800 mg/kg

Skin Absorption

LD50, Rabbit > 8,400 mg/kg

Repeated Dose Toxicity

In animals, effects have been reported on the following organs: Blood. May cause central

nervous system effects.

Chronic Toxicity and Carcinogenicity

Did not cause cancer in laboratory animals.

Developmental Toxicity

Did not cause birth defects or any other fetal effects in laboratory animals.

Reproductive Toxicity

Studies in laboratory animals indicate that diethylene glycol monoethyl ether (DEGEE) is not a reproductive toxicant even when given in large amounts (a few percent in the drinking water). However, at the highest doses, it caused some toxic effects in offspring of treated animals: increased liver weight, decreased brain weight, reduced sperm motility.

Genetic Toxicology

In vitro genetic toxicity studies were predominantly negative. Animal genetic toxicity studies were negative

12. Ecological Information

ENVIRONMENTAL FATE

Movement & Partitioning

Bioconcentration potential is low (BCF less than 100 or log Pow less than 3). Potential for mobility in soil is very high (Koc between 0 and 50).

Henry's Law Constant (H): 2.22E-08 atm*m3/mole; 25°C Estimated Partition coefficient, n-octanol/water (log Pow): -0.54 Measured Partition coefficient, soil organic carbon/water (Koc): 20 Estimated

Persistence and Degradability

Material is readily biodegradable. Passes OECD test(s) for ready biodegradability. Material is ultimately biodegradable (reaches >70% mineralization in OECD test(s) for inherent biodegradability).

Indirect Photodegradation with OH Radicals

Rate Constant	Atmosp	heric	Half-life Method	
3.14E-11 cm3/s	4.	093 h	Estimated	
OECD Biodegradation Tests:				
Biodegradation	Exposu	re Time	Method	
90%	2	28 d	OECD 301E Test	
>90%	Ę	3.5 d	OECD 302B Test	
Biological oxygen demand (F	BOD):			
BOD 5 BOD 10	BOD 20	BOD 28		
5 – 17%	31 – 71%	49 - 87%		

Chemical Oxygen Demand: 1.84 mg/mg Theoretical Oxygen Demand: 1.91 mg/mg ECOTOXICITY

Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50>100 mg/L in the most sensitive species tested).

Fish Acute & Prolonged Toxicity

LC50 blue gill (Lepomis macrochirus), flow-through, 96 h: 21,400 mg/l Aquatic Inverte-

brate Acute Toxicity

EC50, water flea Daphnia magna, 48 h: 3,940 – 4,670 mg/l Toxicity to Micro-organisms EC10; bacteria, 16 h: 4,000 mg/l

13. Disposal Considerations

Disposal: DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. All

disposal practices must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. AS YOUR SUPPLIER, WE HAVE NO CONTROL OVER THE MANAGEMENT PRACTICES OR MANUFACTURING PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL. THE INFORMATION PRESENTED HERE PERTAINS ONLY TO THE PRODUCT AS SHIPPED IN ITS INTENDED CONDITION AS DESCRIBED IN MSDS SECTION: Composition information. FOR UNUSED &

UNCONTAMINATED PRODUCT, the preferred options include sending to a licensed, permitted: Incinerator or other thermal destruction device.

14. Transport Information

The data provided in this section is for information only and may not be specific to your package size. You will need to apply the appropriate regulations to properly classify your shipment for transportation.

DOT Non-Bulk NOT REGULATED

DOT Bulk NOT REGULATED

This information is not intended to convey all specific regulatory or operational requirements/ information relating to this product. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

15. Regulatory Information

OSHA Hazard Communication Standard This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 TITLE III

(Emergency Planning and Community Right to Know Act of 1986) SECTION 311 and 312

Immediate (Acute) Health Hazard No

Delayed (Chronic) Health Hazard Yes

Fire Hazard Yes

Reactive Hazard No

Sudden Release of Pressure Hazard No

SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 TITLE III (Emergency Planning and Community Right to Know Act of 1986) SECTION 313 This product contains the following substances which are subject to the reporting requirements

Component CAS# Amount

Glycol Ethers Not available 99.0 - 100.0 %

of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and which are listed in 40 CFR

Pennsylvania (Worker and Community Right to Know Act): Pennsylvania Special Hazardous Substances List: To the best of our knowledge, this product does not contain chemicals at levels which require reporting under this statute

Pennsylvania (Worker and Community Right to Know Act): Pennsylvania Hazardous Substances List and/or Pennsylvania Environmental Hazardous Substance List:

The following product components are cited in the Pennsylvania Hazardous Substance List and/ or the Pennsylvania Environmental Substance List, and are present at levels which require reporting

Component CAS# Amount Glycol Ethers Not available 99.0 – 100.0 %

CALIFORNIA PROPOSITION 65 (Safe Drinking Water and Toxic Enforcement Act of 1986) WARNING: This product contains a chemical (s) known to the State of California to cause birth defects or other reproductive harm.

Component CAS# Amount
Ethylene glycol monoethyl ether 110-80-5 <=300.0 PPM

US. Toxic Substances Control Act

All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements under 40 CFR 720.30.

CEPA – Domestic Substances List (DSL)

All substances contained in this product are listed on the Canadian Domestic Substances List (DSL) or are not required to be listed.

16. Other Information

Recommended Uses and Restrictions

Solvent for consumer and industrial applications. We recommend that you use this product in a manner consistent with the listed use. If your intended use is not consistent with the stated use, please contact your sales or technical service representative.

Disclaimer:

Vacuum Pressing Systems inc. provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose. VACU-UM PRESSING SYSTEMS INC. MAKES NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, INCLUDING WITHOUT LIMITATION ANY WARRANTIES OF MERCHANTA-BILITY, FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THE INFORMATION SET FORTH HEREIN OR THE PRODUCT TO WHICH THE INFORMATION REFERS. ACCORDINGLY, VACCUM PRESSING SYSTEMS, INC. WILL NOT BE RESPONSIBLE FOR DAMAGES RESULTING FROM USE OF OR RELIANCE UPON THIS INFORMATION.