1. IDENTIFICATION OF THE SUBSTANCE/PREPARATIONS AND OF THE COMPANY UNDERTAKING

Product Name: Product Description: Manufacturer/Supplier: Phone Number: 24 Hr Number: Revision Date: SDS Date: Griffolyn Vinyl Adhesive Also known as Vinyl Cement Solvent based adhesive Reef Industries Inc. 9209 Almeda Genoa Road Houston, TX 77075 (800) 231-6074 (Monday – Friday 8:00 am to 5:00 pm) 713 507-4349 30 December 2024 **Revision:** 2 6 June 2011

Safety Data Sheet according to OSHA's Hazcom Standard (1910.1200 App C)

2. HAZARDS IDENTIFICATION

Emergency Overview Highly flammable. Causes serious eye irritation. May cause respiratory irritation. May cause drowsiness or dizziness. May damage fertility or the unborn child. Suspected of causing cancer.

Health Hazards (Acute and Chronic):

Inhalation: Overexposure may cause irritation to respiratory system. Extreme overexposure to vapors could result in central nervous system, liver and kidney damage.

Absorption: Prolonged skin contact can cause defatting and possible dermatitis.

Eye: Overexposure to vapors may cause irritation.

Ingestion: May cause gastrointestinal irritation.

Potential Health Effects:

Acute Health Hazards: None. Does not apply.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Solvent based Adhesive

Component Name	CAS#/Codes	OSHA PEL	ACGIH TLV	Other Limits	୫
Methyl Ethyl Ketone**	78-93-3	200 PPM	200 PPM		46
Acetone	67-61-1	750 PPM	750 PPM		21.5
Toluene**	108-88-3	100 ppm	100 ppm	50 ppm skin	19

(** The above chemicals are subject to the reporting requirements of Section 313 of SARA Title III) $% \left(\left({{{\mathbf{T}}_{{\mathbf{T}}}} \right)^{2}} \right)$

4. FIRST AID MEASURES

Eyes

Immediately flood the eye with plenty of water for at least 15 minutes, holding the eye open. Obtain medical attention if soreness or redness persists.

Skin

If material comes in contact with skin, remove immediately. Seek medical attention immediately if adhesive cannot be removed.

Ingestion

If swallowed seek medical attention. May cause gastrointestinal blockage. Obtain medical attention immediately.

Inhalation

If fumes from the burning product are inhaled, move the individual to an area with fresh air immediately. Seek medical evaluation if symptoms persist or worsen. Advice to Physicians

Treat symptomatically.

5. FIRE -FIGHTING MEASURES

Flammable limits in Air, UPPER:12 %(% By Volume)LOWER:1 %

Flash Point: 6 degrees F (-14 degrees C)

Autoignition Temperature: Not Available

Extinguishing Media: Foam, carbon dioxide and dry chemical.

Unusual Fire and Explosion Hazard: Extremely flammable Closed container near fire could explode due to pressure build up.

Hazardous Decomposition Products: Not Applicable.

Advice on protection against fire and explosion: Keep away from open flames, hot surfaces, and sources of ignition. Take precautionary measures against static discharge.

6. ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES Not Applicable.

7. HANDLING AND STORAGE

Steps to Be Taken in Case Material Is Released or Spilled:

Extinguish all sources of ignition in area. Collect spilled material and place in a closed container for disposal or salvage.

Waste Disposal Method: Dispose in accordance with all current local, state and federal regulations.

Precautions to Be Taken in Handling and Storage:

Keep away from heat, open flames and sparks. Use and store with adequate ventilation to prevent vapor buildup. Vapors released by product can easily ignite.

Other Precautions:

Avoid contact with skin and eyes. Avoid prolonged breathing of vapors. Keep container closed when not in use.

KEEP OUT OF REACH OF CHILDREN.

Use safe handling practices to avoid physical Injury

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Local Exhaust: Should be used to maintain exposure below TLV(s) - SECTION 2.

Mechanical (General): Should be used to maintain exposure below TLV(s) - SECTION 2.

Special: Explosion proof ventilation may be required to control vapor concentrations.

Ventilation: Large amounts of fresh air required in work area. Exhaust in work area to maintain exposure below TLV levels.

Other Protective Clothing and Equipment: Work apron to avoid contact with personal clothing and skin.

Eye Protection: Protective chemical goggles or safety glasses

Skin Protection: Impervious solvent resistant gloves

Exposure Guidelines: If exposure exceeds occupational exposure limits (SECTION 2), use a NIOSH approved respirator to prevent overexposure. Per 29 CFR 1910.134 CCROV or SA types recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Thick clear liquid Color: Clear viscous liquid Odor: Strong solvent smell Specific Gravity: .87 - .88 Boiling Range/Point (°C/F): 132 degrees F Melting Point (°C/F): 90-135 °C Flash Point (PMCC) (°C/F): Not known Vapor Pressure at 68 Degrees F: 180 mm Vapor Density: (Air=1) Heavier than air Solubility in Water: Insoluble

10. STABILITY AND REACTIVITY

Stability

Stable under normal conditions.

Conditions to Avoid

-Heat -High temperatures

Materials to Avoid

Strong Oxidizing Agents

Hazardous Decomposition Products

Hydrocarbon oxidation products - oxides of carbon - hydrocarbons - aldehydes - oligomers- smoke - acrid fumes.

11. TOXICOLOGICAL INFORMATION

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole. Information on Toxicological effects Signs and Symptoms of Exposure Based on test data and/or information on the components, this material may produce the following health effects: Inhalation: May be harmful if inhaled. Simple Asphyxiation: Signs/symptoms may include increased heart rate, rapid respirations, drowsiness, headache, incoordination, altered judgement, nausea, vomiting, lethargy, seizures, coma, and may be fatal. Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain. May cause additional health effects (see below). Skin Contact: Mild Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, and dryness. Eye Contact: Severe Eye Irritation: Signs/symptoms may include significant redness, swelling, pain, tearing, cloudy appearance of the cornea, and impaired vision. Ingestion: Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea. May cause additional health effects (see below). Additional Health Effects: Single exposure may cause target organ effects: Central Nervous System (CNS) Depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness. Prolonged or repeated exposure may cause target organ effects: Ocular Effects: Signs/symptoms may include blurred or significantly impaired vision. Auditory Effects: Signs/symptoms may include hearing impairment, balanced dysfunction and ringing in the ears. Olfactory Effects: Signs/symptoms may include decreased ability to detect odors and/or complete loss of smell. Neurological Effects: Signs/symptoms may include personality changes, lack of coordination, sensory loss, tingling or numbness of the extremities, weakness, tremors, and/or changes in blood pressure and heart rate. Reproductive/Developmental Toxicity: Contains a chemical or chemicals which can cause birth defects or other reproductive harm. Carcinogenicity: Contains a chemical or chemicals which can cause cancer.

Ingredient	CAS No.	Class Description	Regulation	
Methyl ethyl Ketone	78-93-3	Grp. 2B: Possible human carc	International Agency	
			for Research on Cancer	

Acute Toxicity

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Methyl ethyl ketone	LD50 = 2483 mg/kg (Rat)	LD50 = 5000 mg/kg (Rabbit)	LC50 = 11700 ppm (Rat)

12. ECOLOGICAL INFORMATION

Ecotoxicity

Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
Methyl ethyl ketone	Not listed	Lepomis macrochirus: LC50=3,22 g/L 96 h	EC50 = 3403 mg/L 30 min EC50 = 3426 mg/L 5 min	EC50: = 5091 mg/L, 48h (Daphnia magna) EC50: 4025 - 6440 mg/L, 48h Static (Daphnia magna) EC50: > 520 mg/L, 48h (Daphnia magna)

Persistence and Degradability

Persistence is unlikely based on information available.

Bioaccumulation/ Accumulation

No information available.

Mobility

Will likely be mobile in the environment due to its volatility. Component: Methyl ethyl ketone log: Pow 0.29

13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with all applicable local and national regulations.

14. TRANSPORT INFORMATION

DOT

UN-No UN1193 Proper Shipping Name: Ethyl methyl ketone Hazard Class 3 Packing Group II TDG UN-No UN1193 Proper Shipping Name: ETHYL METHYL KETONE Hazard Class 3 Packing Group II IATA UN-No UN1193 Proper Shipping Name: Methyl ethyl ketone Hazard Class 3 Packing Group II IMDG/IMO UN-No UN1193 Proper Shipping Name: Ethyl methyl ketone (Methyl ethyl ketone) Hazard

Class 3 Packing Group II

15. REGULATORY INFORMATION

NFPA Ratings

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NFPA Code for Flammability -3
NFPA Code for Health -2
NFPA Code for Reactivity -0
NFPA Code for Special Hazards - 0
DOT Information: Adhesives,3, UN1133, PG11
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16. OTHER INFORMATION

Abbreviations

N/A: Denotes no applicable information found or available CAS#: Chemical Abstracts Service Number ACGIH: American Conference of Governmental Industrial Hygienists OSHA: Occupational Safety and Health Administration TLV: Threshold Limit Value PEL: Permissible Exposure Limit STEL: Short Term Exposure Limit NTP: National Toxicology Program IARC: International Agency for Research on Cancer LC50: Lethal Concentration 50% LD50: Lethal Dose 50%

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