

ORSLAND SPORTS, INC.
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64231

MATERIAL NAME: Universal Cement

PRODUCT NO: See pages 5 & 6

MATERIAL SAFETY DATA SHEET

Issue Date: 12/26/91 MSDS No: 101
 NFPA: 3-1-1 HMIS: 2-1-0-0

SECTION I (GENERAL INFORMATION)

MANUFACTURER: CAMEL TIRE CARE PRODUCTS
 500 SE 48th Street
 Muskogee, Oklahoma 74402
 (918) 687-5427

EMERGENCY: (918) 687-5427
CHEMTREC: (800) 424-9300

TRADE NAME & SYNONYMS: Universal Cement, Rubber Adhesive

CHEMICAL FAMILY: Halogenated solvent

SHIPPING NAME	PACKING GROUP	DOT HAZARD CLASS	UN/NA#
Cement, Adhesive, N.O.S (1,1,1-Trichloroethane)	ORM-D ORM-D-AIR	6.1	NA 1133

SECTION II - INGREDIENTS

INGREDIENT	CAS NO.	OSHA-PEL		ACGM-TLV		%
		TWA %AB	STEL %AB	TWA %AB	STEL %AB	
<u>1,1,1-Trichloroethane</u>	71-55-6	350B	450B	350B	450B	80-85
Contains Inhibitors:						
<u>1,3-Dioxolane</u>	646-06-0					2-3
<u>1,2-Butylene oxide</u>	106-88-7					4
<u>Nitromethane</u>	75-52-5	100B		100B		4
<u>Sec-Butyl alcohol</u>	78-92-2	100B		100B	150B	1-2
Non hazardous ingredients						10-15

Units - A: mg/m³, B: ppm

SARA SECTION 313: If the above ingredients are underlined, they are listed in 40 CFR 372.45 Superfund Amendments and Reauthorization Act (SARA) Section 313, and are present in quantity greater than the "de minimis" concentration. Therefore those underlined ingredients are subject to the reporting requirements of SARA Section 313.

SECTION III - PHYSICAL DATA

BOILING POINT (760 MM HG): 165F **MELTING POINT:** NA

SPECIFIC GRAVITY (H₂O = 1): 1.3 (25/25C) **EVAPORATION RATE (BuAc=1):** UN

VAPOR DENSITY (air=1): 4.6 **VAPOR PRESSURE AT 20° C:** 100mm Hg

PERCENT VOLATILE BY VOLUME (%): >90

SOLUBILITY IN WATER: 0.07% (Wgt) at 25C

APPEARANCE & ODOR: Amber Viscous liquid. Irritating odor at high concentration.

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MSDS Nos 101**SECTION IV - FIRE AND EXPLOSION HAZARD DATA**

FLASH POINT (METHOD USED): NA IGNITION SENSITIVITY: NA
 FLAMMABLE LIMITS: LEL: 7.5% EXPLOSION SEVERITY: NA
 UEL: 12.5%
 MINIMUM EXPLOSION CONCENTRATION: NA
 IGNITION TEMPERATURE: NA

EXTINGUISHING MEDIA: Use dry chemical, foam, carbon dioxide, or water spray for fire extinguishing.

SPECIAL FIRE FIGHTING PROCEDURES: Wear positive pressure self-contained breathing apparatus, or air-supplied fully encapsulating suit.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Vapors of this product may develop a flammable atmosphere in confined or poorly ventilated area. DO NOT CUT or WELD CONTAINER due to explosion hazard.

SECTION V - HEALTH HAZARD DATA

ROUTES OF ENTRY: Inhalation, Ingestion
 CARCINOGENIC: NA
 NTP: NA IARC MONOGRAPH: UN OSHA: NA NE

EMERGENCY AND FIRST AID PROCEDURES:

EYES: Irrigate with flowing water immediately and continuously for 15 minutes. Consult medical personnel.

SKIN: Wash off in flowing water or shower.

INGESTION: Do not induce vomiting. Call a physician and/or transport to emergency facility immediately.

INHALATION: Remove to fresh air. If not breathing, give mouth-to-mouth resuscitation. If breathing is difficult, give oxygen. Call a physician.

NOTE TO PHYSICIAN: Because rapid absorption may occur through lungs if aspirated and cause systemic effects, the decision of whether to induce vomiting or not should be made by a physician. If lavage is performed, suggest endotracheal and/or esophageal control. Danger from lung aspiration must be weighed against toxicity when considering emptying the stomach. Exposure may increase "myocardial irritability." Do not administer sympathomimetic drugs unless absolutely necessary. No specific antidote

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MSDS Nos. 101**INGREDIENT - HEALTH HAZARDS, SIGNS & SYMPTOMS OF EXPOSURE****1,1,1-Trichloroethane**

EYE: May cause pain. May cause slight irritation with corneal injury. Vapors may irritate eyes.

SKIN CONTACT: Prolonged or repeated exposure may cause skin irritation. Repeat contact may cause drying or flaking skin.

SKIN ABSORPTION: A single prolonged skin exposure is not likely to result in absorption of harmful amounts. The LD50 for rabbits is likely >2000 mg/kg.

INGESTION: Single dose oral toxicity is believed to be low. The oral LD50 for rats is likely >2000 mg/kg. If aspirated (liq. enters the lung), may be rapidly absorbed through the lungs and result in injury to other body systems. Small amounts swallowed incidental to normal handling operations are not likely to cause injury; swallowing amounts larger than that may cause injury.

INHALATION: Minimal anesthetic or narcotic effects may be seen in the range of 500-1000 ppm 1,1,1-trichloroethane. Progressively higher levels over 1000 ppm may cause dizziness, drunkenness; concentrations as low as 10,000 ppm can cause unconsciousness and death. These high levels may also cause cardiac arrhythmias (irregular heartbeats). In confined or poorly ventilated areas, vapors which readily accumulate can cause unconsciousness and death.

SYSTEMIC (OTHER TARGET ORGAN) EFFECTS: Based on available data, repeated exposures are not anticipated to cause any significant adverse effects. In laboratory animals, components present here in only small amounts have caused incoordination, and decreased white blood cell counts, thyroid, liver, and kidney effects.

CANCER INFORMATION: A formulation containing similar levels of 1,1,1-trichloroethane, butylene oxide, and nitroethane did not cause cancer in long-term animal studies.

TERATOLOGY (BIRTH DEFECTS): Exposures to 1,1,1-trichloroethane having no adverse effects on the mother should have no effect on the fetus. A minor component present in this material in small amounts, when tested separately, did not cause birth defects in animals; other effects were seen in the fetus only at doses which caused toxic effects to the mother.

REPRODUCTIVE EFFECTS: In animal studies, 1,1,1-trichloroethane has not interfered with reproduction. In laboratory studies, a component present here in small amounts produced depressed growth of young rats following exposure to high levels in drinking water.

MUTAGENICITY (EFFECTS ON GENETIC MATERIAL): Results of in vitro (test tube) mutagenicity tests have been negative. Results of mutagenicity tests in animals have been negative.

SECTION VI - SPILL OR LEAK PROCEDURES**RESPONSE AND WASTE DISPOSAL STEPS FOR RELEASES OR SPILLS:**

ACTION TO TAKE FOR SPILLS/LEAKS: Small leaks: Mop up, wipe up, or soak up immediately. Remove to out-of-doors. Large spills: Evacuate area. Contain liquid; transfer to closed metal containers. Keep out of water supplies.

DISPOSAL METHOD: When disposing of unused contents, send to licensed reclaimer. Any disposal practice must be in compliance with federal, state, and local laws and regulations. Do not dump into sewers, on the ground, or into any body of water.

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SECTION VII - REACTIVITY DATA

STABILITY: Stable
CONDITIONS TO AVOID: Avoid open flames, welding area or other high temperature sources which induce thermal decomposition.

INCOMPATIBILITY (MATERIALS TO AVOID): Prolonged contact with free water may result in diminished stabilizer levels and slow hydrolysis producing corrosive acid. Prolonged contact with, or storage in aluminum, or its alloys, and particularly metallic aluminum and zinc powders should be avoided. These reactive metals can cause hydrochloric acid gas to form and, if confined as in an aerosol can or pump, the gas pressure may rupture the container.

HAZARDOUS DECOMPOSITION PRODUCTS: Hydrogen chloride and very small amounts of phosgene and chlorine.

HAZARDOUS POLYMERIZATION: Will not occur.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (SPECIFY TYPE): Atmospheric levels should be maintained below the exposure guideline. When respiratory protection is required for certain operations, use an approved air-purifying respirator. For emergency and other conditions where the exposure guideline may be greatly exceeded, use an approved positive pressure self-contained breathing apparatus. In confined or poorly ventilated areas, use an approved positive pressure air respirator, and have an observer in attendance.

VENTILATION: Provide general and/or local exhaust ventilation to control airborne levels below the exposure guidelines. Lethal concentrations may exist in areas with poor ventilation.

SKIN PROTECTION: For brief contact, no precautions other than clean body-covering clothing should be needed. When prolonged or frequently repeated contact could occur, use protective clothing impervious to this material. Selection of specific items such as gloves, boots, apron, or full body suit will depend on operation.

EYE PROTECTION: Use chemical goggles.

SECTION IX - SPECIAL PRECAUTIONS

SPECIAL PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE

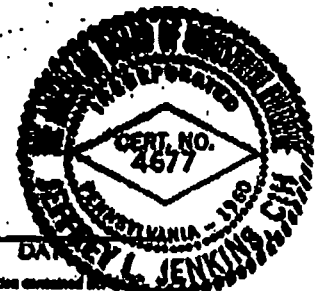
Use reasonable care. Avoid breathing vapors. Store in cool dry place. Concentrated vapors are heavier than air and will collect in low areas such as pits, tanks, and confined areas. Do not enter areas where vapors are suspected unless special breathing apparatus is used and an observer is present. Products containing 1,1,1-trichloroethane should not be used in contact with aluminum or zinc.

APPROVAL

[Signature]
NAME

[Signature]
TITLE

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