Product Name: Chemical Vulcanizing Cement Page 1 of 4

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Chemical Vulcanizing Cement

MANUFACTURER'S NAME:

100 Enterprise Drive

Uncured Natural Rubber

31 Incorporated

STREET ADDRESS:

PART NUMBER(S): 1010001, 1010001C, 1010002, 1010002C, 1010003,

1010003C, 1010019, 1010019C, 1010020, 1010020C

GENERAL USE: Chemical or Heat Vulcanization of Tire Repair Materials PRODUCT DESCRIPTION: Liquid with solvent odor that is cloudy or blue in color

10 - 15



SUPERSEDES:

FOR INFORMATION, CONTACT: (740) 498-8324; info@31inc.com

May 19, 2009



EMERGENCY TELEPHONE NUMBER: CITY, STATE, ZIP, COUNTRY Newcomerstown, OH 43832 USA CHEM • TEL: (800) 255-3924 or (813) 248-0585 **SECTION 2 - HAZARDOUS INGREDIENTS RISK PHRASES** Hazard TLV UNITS HAZARDOUS COMPONENTS CAS# (by weight) Symbol (Full Text Section 16) 142-82-5 400 PPM N/A Heptane 80 - 90 Methylcyclohexane 0.5 108-87-2 400 PPM N/A

N/A

SECTION 3 - HAZARDS IDENTIFICATION						
EMERGENCY OVERVI	EW					
Contact with eyes will cause irritation. Contact with skin may cause irritation. ACCUTE EFFECTS OF OVEREXPOSURE:						
Skin:	May cause irritation upon prolonged or repeated contact					
Eyes:	May cause eye irritation.					
Ingestion:	May cause irritation of gastrointestinal tract.					
CHRONIC EFFECTS O	F OVEREXPOSURE:					
OTHER HEALTH HAZA	RDS:					
N/A						
	SECTION 4 - FIRST AID MEASURES					
INHALATION:	If difficulty breathing, dizziness, or lightheadedness is experienced, remove victim to fresh air. If continued breathing difficulities occur, administer oxygen and seek immediate medical attention.					
SKIN:	Wash with soap and large quantities of water. If irritation persists, seek medical attention.					
EYES:	Flush with large quantities of clean water for at least 15 minutes. Seek medical attention.					
INGESTION:	Do NOT give anything by mouth or induce vomiting. Seek immediate medical attention.					

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SECTION 5 - FIRE FIGHTING MEASURES EXTINGUISHING MEDIA: Foam, CO₂, Dry Chemical, Fire Fighting Apparatus

FIRE FIGHTING PROCEDURES: Use of self contained breathing apparatus is recommended for fire fighters

UNUSUAL FIRE AND Extremely flammable and may be ignited by heat, sparks, flame, or other source of ignition. EXPLOSION HAZARDS: Closed containers can explode due to buildup of pressure when exposed to extreme heat.

SECTION 6 - ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

COMBUSTIBLE - Evacuate and ventilate area; remove all sources of sparks, ignition, and open flames; confine and absorb into approved absorbent; place material into approved containers for disposal following all Local, State, and Federal regulations; Do NOT wash to sewer or waterway. Note: Small amounts may be taken up with inert material.

SECTION 7 - HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE:

This material is combustible. It should be stored in tightly closed containers in a cool, well ventilated area. Vapors may form explosive mixtures in air. All sources of ignition should be controlled. Keep this and other chemicals out of reach of children. Avoid inhaling concentrated fumes or vapors.

SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION NIOSH ACGIH HAZARDOUS COMPONENTS TWA ppm TWA mg/m3 STEL ppm STEL mg/m3 TWA ppm TWA mg/m3 STEL ppm STEL mg/m3 Heptane Methylcyclohexane Uncured Natural Rubber PERSONAL PROTECTION: Respiratory Protection: Use NIOSH approved cartridge or gas mask. Refer to 29 CFR 1910.134 or European Standard EN 149 for complete regulations. Ventilation: Mechanical ventilation to keep product within specified TLV ranges. Protective Gloves: Imperable gloves advised. Eye Protection: Protective eyeglasses or chemical safety goggles. Refer to 29 CFR 1910.133 or European Standard EN 166. Other: Work clothes Work / Hygienic Practices: Practice safe workplace habits. Minimize body contact with this product.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES					
APPEARANCE AND ODOR:	VAPOR PRESSURE AT 20°C:				
Liquid with solvent odor that is cloudy or blue in color	N/A				
BOILING POINT / RANGE:	SPECIFIC GRAVITY:				
200° - 209° F (93.3° - 98.3°C)	0.77				
FREEZING POINT:	SOLUBILITY IN WATER (% by weight):				
N/A	N/A				
FLASH POINT (Test Methods):	V.O.C.:				
32°F, 0°C (TCC)	75% - 85%				
FLAMMABLE LIMITS IN AIR (% by volume):	VAPOR DENSITY:				
Lower: 1.0 Upper: 7.0	N/A				
EVAPORATION RATE:					
4.50					

Product Name: Chemical Vulcanizing Cement Page 3 of 4

SECTION 10 - STABILITY AND REACTIVITY									
STABILITY:	UNSTABLE: STABLE:	XXX	CONDITIONS TO A	VOID:	N/A				
INCOMPATIBILITY (Materials to Avoid): Strong acids or bases and selected amines.									
HAZARDOUS COMBUSTION or DECOMPOSITION PRODUCTS:		Thermal decomposition in the presence of air may yield carbon monoxide and/or carbon dioxide.							
HAZARDOUS POLYMERIZATION:	MAY OCCUR: WILL NOT OCCUR:	XXX	CONDITIONS TO AVOID: N/A		N/A				
SECTION 11 - TOXICOLOGICAL INFORMATION									
HAZARDOUS COMPONENTS	CAS # EINECS #		0 OF INGREDIENT fy Species and Route)		LC50 OF INGREDIENT (Specify Species)				
Heptane	142-82-5								
Methylcyclohexane	108-87-2								
Uncured Natural Rubber	N/A								
SECTION 12 - ECOLOGICAL INFORMATION									

No data are available on the adverse effects of this material on the environment. Neither COD nor BOD data are available. Based on the chemical composition of this product, it is assumed that the mixture can be treated in an acclimatized biological waste treatment plant system in limited quantities. However, such treatment should be evaluated and approved for each specific biological system. None of the ingredients in this mixture are classified as a Marine Pollutant.

SECTION 13 - DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Dispose of in accordance with Local, State, and Federal Regulations. This product may produce hazardous vapors or fumes in a closed disposal container creating a dangerous environment. Refer to "40 CFR Protection of Environment Parts 260 - 299" for complete waste disposal regulations. Consult your local, state, or federal Environmental Protection Agency (EPA) before disposing of any chemicals. Do NOT flush to sanitary sewer or waterway.

SECTION 14 - TRANSPORT INFORMATION

PROPER SHIPPING NAME: HEPTANES

DOT HAZARD CLASS / Pack Group: 3

REFERENCE:

UN / NA IDENTIFICATION NUMBER: UN1206

LABEL: FLAMMABLE

HAZARD SYMBOLS:

IATA HAZARD CLASS/Pack Group: 3 PG II IMDG HAZARD CLASS: 3 PG II

RID/ADR Dangerous Goods Code: UN TDG Class / Pack Group:

Note: Transportation information if for reference only. Client is urged to consult CFR 49 parts 100 - 177, IMDG, IATA, EU, United Nations TDG, and WHMIS (Canada) TDG information manuals for detailed regulations and exceptions covering specific container sizes, packaging materials, and methods of shipping.

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SECTION 15 - REGULATORY INFORMATION

TSCA (USA - Toxic Substance Control Act)

All components of this product are listed on the U.S. Toxic Substance Control Act Chemical Inventory (TSCA Inventory) or are exempted from listing because a Low Volume Exemtpion has been granted in accordance with 40 CFR 723.50.

SARA TITTLE III (USA - Superfund Amendments and Reauthorization Act)

311/312 Hazard Categories:

Immediate health

313 Reportable Ingredients:

None

CERCLA (USA - Comprehensive Response Compensation and Liability Act)

CPR (Canadian Controlled Products Regulations)

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

IDL (Canadian Ingredient Disclosure List)

Components of this product identified by CAS number are listed on the Canadian Ingredient Disclosure List are shown in Section 2.

DSL / NDSL (Canadian domestic Substances List / Non-Domestic Substances List)

Components of this product identified by CAS number are listed on the DSL or NDSL and may or may not be listed in Section 2 of this document. Only ingredients classified as "hazardous" are listed in Section 2 unless otherwise indicated.

EINECS (European Inventory of Existing Commercial Chemical Substances)

Components of this product identified by CAS numbers are on the European Inventory of Existing Commercial Chemical Substances.

RISK PHRASES:

R36/38 Irritating to eyes and skin

SYMBOL(S) REQUIRED FOR LABEL:







SAFETY PHRASES:

S2 Keep out of reach of children S41 In case of fire and/or explosion do not breathe fumes.

SECTION 16 - OTHER INFORMATION

NOTES & FULL R-PHRASE TEXT:

R36/38 Irritating to eyes and skin

HMIS HAZARD RATINGS: **HEALTH**

> **FLAMMABILITY** 3 REACTIVITY O

PERSONAL PROTECTIVE EQUIPMENT Α

REVISION SUMMARY:

MSDS PREPARED BY: Charles Muhs, Technical Advisor

> 31 Incorporated 100 Enterprise Dr.

Newcomerstown, OH 43832 (740) 498-8324 chuck@31inc.com

The information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. Vendor assumes no responsibility for injury to vendee or third persons proximately caused by the materials if reasonable safety procedures are not adhered to as stipulated in the data sheet. Additionally, vendor assumes no responsibility for injury to vendee or third person proximately caused by abnormal use of the material, even if reasonable safety procedures are followed. Furthermore, vendee assumes the risk in his use of the material.