MATERIAL SAFETY DATA SHEET

SECTION 1 —- PRODUCT INFORMATION

Product Identifier: **CHEMICAL VULCANIZING ADHESIVE # 130 (FLAMMABLE)**	Chemical Name: Natural Rubber Chemical Vulcanizing Adhesive
Chemical Family: Hydrocarbon & Chlorinated Solvent	C.A.S. Registry #: Mixture
Transport Information: DOT Proper Shipping Name: Adhesive, containing a flammable liquid DOT Identification Number: UN 1133 DOT Hazard Class: 3 DOT Packaging Group: II	
Manufacturer's Name: Treads Direct dba MidWest Rubber Mfg., Inc.	Address: P.O. Box 278, 250 Industrial Circle Stoughton, Wisconsin U.S.A., 53589
Distributor's Name: Natco Manufacturing Ltd.	Address: 1456 Church Avenue, Winnipeg, Manitoba CANADA R2X 1G4 Tel: (204) 633-5432 Fax: (204) 694-3320

SECTION 2 —- PREPARATION INFORMATION

Prepared On:	Supercedes:	Changes:
January 1, 2015	January 1, 2014	None

Prepared By:	Emergency Phone Number:
Technical Department	Chemtrac: (800) 424-9300 (24 Hrs)

The information provided in this material safety data sheet is believed to be correct as of the date issued.
HOWEVER, NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR ANY OTHER WARRANTY IS EXPRESSED OR IS TO BE IMPLIED REGARDING THE ACCURACY OR COMPLETENESS OF THIS INFORMATION, THE RESULTS TO BE OBTAINED FROM THE USE OF THIS INFORMATION OR THE PRODUCT, THE SAFETY OF THIS PRODUCT, OR THE HAZARDS RELATED TO ITS USE.
This information and product are furnished on the condition that the person receiving them shall make his own determination as to the suitability of the product for this particular purpose and on the condition that he assume the risk of his use thereof.

SECTION 3 —- HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW	
Extremely flammable liquid. Eye and skin irritant. A component may cause allergic skin reaction. A component is a probable cancer hazard. Over-exposure may cause damage to the liver, lungs and kidneys. Keep away from heat, sparks, flames, static electricity or other sources of ignition. Use ventilation adequate to keep exposures below recommended limits. Avoid contact with eyes, skin and clothing. Do not taste or swallow. Wash thoroughly after handling. Blue or amber, viscous liquid, typical hydrocarbon odour.	
POTENTIAL HEALTH EFFECTS:	
EYE CONTACT:	Eye irritant. Contact may cause stinging, watering, redness, swelling and eye damage.
SKIN CONTACT:	Skin irritant. Contact may cause redness, itching, burning and skin damage. Prolonged or repeated contact can worsen by causing drying and cracking of the skin, leading to dermatitis (inflammation). Repeated contact with a component may cause an allergic reaction. Low degree of toxicity by skin absorption.
INHALATION (BREATHING):	Low to moderate degree of toxicity by inhalation.
INGESTION (SWALLOWING):	Low degree of toxicity by ingestion. ASPIRATION HAZARD: — This material can enter lungs during swallowing or vomiting and cause inflammation and damage. A component may cause alcohol intolerance (Antabuse Effect) if swallowed.
SIGNS & SYMPTOMS:	Effects of over-exposure may include nausea, vomiting, irritation of the respiratory and digestive tracts, transplant excitation followed by signs of nervous system depression (eg., headache, drowsiness, dizziness, loss of co-ordination, disorientation and fatigue).
CANCER:	A component is a probable cancer hazard (see Section 12).
TARGET ORGANS:	Potential hazard to the nervous system, liver, lungs, and kidneys (see Section 12).
DEVELOPMENTAL:	A component is a potential developmental toxicant.
OTHER COMMENTS:	A component may react with nitrosating agents during rubber vulcanization to form nitrosamines. Some nitrosamines are suspect human carcinogens.
MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE:	Conditions aggravated by exposure may include skin, respiratory (asthma-like), nervous system, kidney and liver disorders.
SPECIAL INFORMATION TO BE AWARE OF:	Exposure to high concentrations of the material may increase the sensitivity of the heart to certain drugs. Persons with pre-existing heart disorders may be more susceptible to the effect (see Section 5 - Note to Physicians),

SECTION 4 —- COMPOSITION / INFORMATION ON INGREDIENTS

COMPONENTS / INGREDIENTS	CAS NUMBER	TYPICAL WEIGHT PERCENTAGE (%)
Heptane	142-88-5	85%
Trichloroethylene	79-01-6	9%
Zinc Dibutyldithiocarbarnate	136-23-2	1.0—1.4%
Remainder of components / ingredients are either non-hazardous or below regulatory requirements.		

SECTION 5 —- FIRST AID MEASURES

EYE CONTACT:	Immediately move victim away from exposure and into fresh air. If irritation or redness develops, flush eyes with clean water and seek immediate medicate attention. For direct contact, immediately hold upper and lower eyelids open and flush the affected eye(s) with clean water for at least 15—20 minutes. Seek immediate medical attention.
SKIN CONTACT:	Remove contaminated shoes and clothing and flush affected area(s) with large amounts of water. If skin surface is damaged, apply a clean dressing and seek medical attention. If skin surface is not damaged, cleanse affected area(s) thoroughly by washing with mild soap and water. If irritation or redness develops, seek medical attention. Launder all contaminated clothing before re-use.
INHALATION:	If respiratory symptoms develop or other symptoms of exposure develop, move victim away from source of exposure and into fresh air. If symptoms persist, seek medical attention. If breathing difficulties develop, oxygen should be administered by qualified personnel. Seek immediate medical attention. Rescuers should wear respiratory protection.
INGESTION:	Aspiration hazard. DO NOT INDUCE VOMITING or give anything by mouth because this material can enter the lungs and cause severe lung damage. If victim is drowsy or unconscious and vomiting, place on the left side with the head down. If possible, do not leave victim unattended and observe closely for adequacy of breathing. Seek medical attention.. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs.
NOTE TO PHYSICIANS:	Epinephrine and other sympathomimetic drugs may initiate cardiac arrhythmias in persons exposed to high concentrations of hydrocarbon solvents (eg., In enclosed spaces or with deliberate abuse). The use of other drugs with less arrhythmogenic potential should be considered. If sympathomimetic drugs are administered observe for the development of cardiac arrhythmias.

SECTION 6 —- FIRE AND EXPLOSION DATA

Flash Point (test method): 7° F (SFCC)	Flammable Limits (% Volume in Air): Lower: 1.2% Upper: 7%
Auto-ignition Temperature: No Data	NFPA Fire Rating: Health Hazard: 2 Flammability: 3 Reactivity: 0 KEY: Least=0, Slight=1, Moderate=2, High=3, Extreme=4

Extinction Media:

Dry chemical, carbon dioxide or foam is recommended. Water spray is recommended to cool or protect exposed materials or structures. Water may be ineffective for extinguishment, unless used under favourable conditions by experienced fire fighters. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces.

Special Firefighting Procedures:

DANGER, EXTREMELY FLAMMABLE. For fires beyond the incipient stage, emergency responders in the immediate hazard area should wear bunker gear. When the potential chemical hazard is unknown, in enclosed or confined spaces, or when explicitly required by DOT, a self-contained breathing apparatus should be worn. In addition, wear other appropriate protective equipment as conditions warrant (see Section 9). Isolate immediate hazard area and keep unauthorized personnel out. Stop spill / release if it can be done with minimal risk. Move undamaged containers from immediate hazard area if it can be done with minimal risk. Water spray may be useful in minimizing or dispersing vapours and to protect personnel. Cool equipment exposed to fire with water, if it can be done with minimal risk. Avoid spreading burning liquid with water used for cooling purposes.

Unusual Fire & Explosion Hazards:

This material is extremely flammable and can be ignited by heat, sparks, flames or other sources of ignition (eg., static electricity, pilot lights, or mechanical / electrical equipment). Vapours may travel considerable distances to a source of ignition where they can ignite, flashback or explode. May create vapour / air explosion hazard indoors, in confined spaces, outdoors or in sewers. If container is not properly cooled, it can rupture in the heat of a fire. Vapours are heavier than area and can accumulate in low areas. Contact with aluminum parts in a pressurizable fluid system may cause violent reactions.

SECTION 7 —- ACCIDENTAL SPILL / RELEASE MEASURES

DANGER — EXTREMELY FLAMMABLE

Keep all sources of ignition and hot metal surfaces away from spill / release. The use of explosion-proof equipment is recommended. Stay upwind and away from spill / release. Notify persons down wind of spill / release, isolate immediate area and keep unauthorized personnel out. Stop spill / release if it can be done with minimal risk. Wear appropriate protective equipment including respiratory protection as conditions warrant (see Section 9). Prevent spilled material from entering sewers, storm drains, other unauthorized treatment drainage systems, and natural waterways. Dyke far ahead of spill for later recovery or disposal. Spilled material may be absorbed into an appropriate federal, state, and local agencies. Immediate cleanup of any spill / release is recommended.

SECTION 8 —- HANDLING AND STORAGE

Handling Procedures:

Open container slowly to relieve any pressure. Bond and ground all equipment when transferring from one vessel to another. Can accumulate static charge by low or agitation. Can be ignited by static discharge. The use of explosion-proof equipment is recommended and may be required (see appropriate fire codes). Do not enter confined spaces as tanks or pits without following proper entry procedures such as ASTM D-4276 and 29CFR 1910.146. The use of appropriate respiratory protection is advised when concentrations exceed any established exposure limits (see Sections 3 and 9). Wash thoroughly after handling. Do not wear contaminated clothing or shoes. Keep contaminated clothing away from sources of ignition such as sparks or open flames. Use good personal hygiene practice.

"Empty" containers retain residue and may be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind or expose such containers to heat, flame, sparks, or other sources of ignition. They may explode and cause injury or death. "Empty" drums should be completely drained, properly bunged and promptly shipped to the supplier or a drum re-conditioner. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

Before working on/in tanks which contain or have contained this material, refer to OSHA Regulations, ANSIZ49.1 and other governmental and industrial references pertaining to cleaning, repairing, welding or other contemplated operations.

Storage Requirements:

Keep containers tightly closed. Use and store this material in a cool, dry, well-ventilated areas away from heat and all sources of ignition. Post area "No Smoking or Open Flame". Store only in approved containers. Keep away from any incompatible material (see Section 11). Aluminum equipment should not be used for storage and / or transfer of chlorinates. Protect containers against physical damage. Outdoor or detached storage is preferred. Indoor storage should meet OSHA standards and appropriate fire codes.

SECTION 9 —- EXPOSURE CONTROL / PROTECTIVE EQUIPMENT

VENTILATION:	If current ventilation practices are not adequate to maintain airborne dust concentrations below the established exposure limits (see Section 3), additional ventilation or exhaust systems may be required.
EYES:	The use of a face shield and chemical goggles to safeguard against potential eye contact, irritation or injury is recommended.
SKIN:	The use of gloves impervious to the specific material handled is advised to prevent skin contact, possible irritation, absorption and skin damage (see glove manufacturer literature for information on permeability). Depending on conditions of use, apron and / or arm covers may be necessary.
RESPIRATORY:	A NIOSH or MSHA approved air purifying respirator with an organic vapour cartridge may be used under conditions where airborne concentrations are expected to exceed exposure limits (see below). Protection provided by air purifying respirators is limited (see manufacturer's respirator selection guide). Use a positive pressure air supplied respirator if there is potential for uncontrolled release, exposure levels are not known, or any other circumstances where air-purifying respirators may not provide adequate protection. A respiratory protection program that meets OSHA's 29 CFR1910.134 and ANSI Z88.2 requirements must be followed whenever workplace conditions warrant a respirator's use.
OTHER:	Eye wash and quick-drench shower facilities should be available in the work area. Thoroughly clean shoes and wash contaminated clothing before re-use. It is recommended that impervious clothing be worn.

EXPOSURE GUIDELINES

COMPONENT	ACGIH TLV	ACGIH STEL	OSHA PEL	OSHA CEIL	OSHA PEAK
Heptane	400 ppm	500 ppm	500 ppm	None	None
Tricloroethylene	10 ppm	25 ppm	100 ppm	200 ppm	300 ppm (5 min. in any 2 hrs)
Zinc Dibutyldthiocarbernate	None	None	None	None	None

SECTION 10 —- PHYSICAL & CHEMICAL PROPERTIES

Appearance: Blue or Amber, Viscous Liquid	Odor: Typical Hydrocarbon Odor	Odour Threshold Limit: 9.77 ppm (heptane), 1.36 ppm (trichloroethylene)	Physical State: Liquid
pH: Not Applicable	Vapor Pressure (mm Hg and Temp): 152	Vapor Density (Air = 1): 3.0 (estimated)	Boiling Point: 120° F — 200° F
Melting Point: Not Applicable	Solubility In Water: Negligible	Specific Gravity (H2O = 1): < 1	Evaporation Rate (Butyl Acetate = 1): 4.4 (estimated)

SECTION 11 —- STABILITY AND REACTIVITY DATA

STABILITY (THERMAL, LIGHT, ETC.):	Stable under normal conditions of storage and handling.
CONDITIONS TO AVOID:	Avoid all possible sources of ignition (see Sections 6 and 8). Contact with Aluminum parts in a pressurizable fluid system may cause violent reactions.
INCOMPATIBILITY (MATERIALS TO AVOID):	Avoid contact with strong acids, alkalines and oxidizers such as liquid chlorine and oxygen.
HAZARDOUS DECOMPOSITION PRODUCTS:	Thermal decomposition may release carbon monoxide, carbon dioxide, hydrogen chloride, traces of phosgene and unidentifiable organic materials.
HAZARDOUS POLYMERIZATION:	Will not occur.

SECTION 12 —- TOXICOLOGICAL INFORMATION

HEPTANE CAS # 142-88-5 —-	TARGET ORGANS: Heptane has demonstrated liver, lung and kidney effects in laboratory animals.
TRICHLOROETHYLENE CAS # 79-01-8 —-	CARCINOGENICITY: There is limited evidence in humans for the carcinogenicity of trichloroethylene. There is sufficient evidence in experimental animals for the carcinogenicity of trichloroethylene. Overall evaluation: Trichloroethylene is probably carcinogenic to humans (group 2A) TARGET ORGANS: Trichloroethylene has demonstrated nervous system, liver, and kidney effects in laboratory animals. DEVELOPMENTAL TOXICITY: Trichloroethylene has demonstrated developmental effects.

SECTION 13 —- ECOLOGICAL INFORMATION

Not Evaluated

SECTION 14 —- DISPOSAL CONSIDERATIONS

All disposal of this material must be done in accordance with local, state and Federal regulations.
Waste characterization and disposal compliance are the responsibility of the waste generator.

SECTION 15 —- REGULATRORY INFORMATION

COMPONENT	TSCA INVENTORY	DSL	SARA 313	SARA 302	CERCLA RQ	CA Prop 65
Heptane	X	X	—-	—-	—-	—-
Trichloroethylene	X	X	X	—-	100	X
Zinc Dibutyldithiocarbarnate	X	X	X	—-	—-	—-
California Safe Drinking Water & Toxic Enforcement Act of 1986 (Proposition 65):	This material / product contains chemicals (as listed above) known to the State of California to cause cancer and / or reproductive toxicity.					
Sections 311 / 312:	This product has been reviewed to the EPA “Hazard Categories” promulgated under Sections 311 and 312 of SARA Title III and is considered under applicable definitions to meet the following categories: ACUTE: Yes CHRONIC: Yes FIRE: Yes REACTIVITY: No					
This material has not been identified as a carcinogen by NTP, IARC or OSHA						

FOR INDUSTRIAL USE ONLY