

1. PRODUCT AND COMPANY IDENTIFICATION

COMMON NAME:	319756-3, Natural Rubber Cement		
CHEMICAL NAME:	Natural Rubber and Solvent Mixture		
FORMULA:	Mixture		
PRODUCT CAS NO.:	Mixture		
SUPPLIER:	Cooper Industries/Crouse-Hinds Molded Products		
ADDRESS:	4758 East Washington Street		
CITY, STATE, ZIP:	La Grange, NC 28551		
PHONE:	(252) 566-3014	EMERGENCY PHONE: 1-800-424-9300 (CHEMTREC)	

2. HAZARDOUS INGREDIENTS: COMPOSITION/INFORMATION

INGREDIENT	% WEIGHT	PEL-OSHA	TLV-ACGIH	LD ₅₀ /LC ₅₀ ROUTE/SPECIES
Xylene CAS: 1330-20-7	60-100	100 ppm	100 ppm 150 ppm (STEL)	LC ₅₀ : 6,350 ppm inhalation/rat (4 H)
Ethylbenzene CAS: 100-41-4	10-20	100 ppm	100 ppm 125 ppm (STEL)	LD ₅₀ : 3,500 mg/kg oral/rat
Natural Rubber CAS: 9010-98-4	7-13	None Established	None Established	No Data
Carbon Black CAS No.: 1333-86-4	1-5	3.5 mg/m ³	3.5 mg/m ³	No Data
Toluene CAS: 108-88-3	0.1-1	200 ppm 300 ppm (C) 500 ppm*	50 ppm	LC ₅₀ : 5,320 ppm inhalation/mouse (8 H)

* Acceptable 10-minute maximum peak above the ceiling concentration for an 8-hour shift.

OSHA Regulatory Status: This material is classified as hazardous under OSHA regulations.

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Flammable black liquid that may cause eye, skin, and respiratory irritation. Inhalation may cause central nervous system (CNS) depression. Contains small amounts of toluene, a substances that may cause birth defects at high concentrations. Dangerous fire and explosion hazard. Avoid heat, sparks, and flames. Store in cool area. Use only with adequate ventilation.

POTENTIAL HEALTH EFFECTS

EYE: Vapors may cause irritation. Splashes may cause temporary damage to the surface of the eye.

SKIN: Repeated contact can dry and defat the skin causing redness, peeling and cracking. May cause allergic skin reaction (dermatitis) in sensitive workers.

INHALATION: Inadequate ventilation may result in overexposure to solvents. Inhalation of high vapor concentrations can cause respiratory irritation and CNS depression.

CHRONIC: Epidemiologic studies among rubber products workers has noted excess deaths from various cancers.

CARCINOGENICITY: IARC: Yes NTP: Yes OSHA: Yes

IARC lists the rubber industry as an exposure circumstance that "entails exposures that are carcinogenic to humans". This product contains carbon black, a substance that has caused cancer in experimental animals and is classified as a possible human carcinogen by IARC (Group 2B). Carbon black is bound in a rubber matrix and release is not expected under normal conditions. IARC classifies ethylbenzene as a possible human carcinogen (Group 2B).

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Irritant properties may aggravate pre-existing eye, skin, and respiratory conditions.

SIGNS AND SYMPTOMS: CNS depression may cause dizziness, excitement, drowsiness, staggering, nausea, and vomiting. Continued overexposure may result in unconsciousness and death.

TARGET ORGANS: Eyes, skin, respiratory system, CNS

4. FIRST AID MEASURES

EYE CONTACT: Immediately flush eyes with lukewarm water for at least 15 minutes. If irritation persists, consult an ophthalmologist.

SKIN: Remove contaminated clothing and wash skin thoroughly with soap and water. If irritation persists or rashes occur, get medical attention.

INHALATION: Immediately remove to fresh air. If breathing problems occur, give supplemental oxygen or artificial respiration as indicated and obtain immediate medical attention.

OTHER: If accidental ingestion occurs, DO NOT INDUCE VOMITING due to potential for aspiration and/or CNS depression. Consult a physician.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

FLASH POINT: 80 °F/26 °C (TCC)*

FLAMMABLE LIMITS: LEL: 1.0* UEL: 6.6*

NFPA HAZARD CLASSIFICATION:

HEALTH: 2 **FLAMMABILITY:** 3 **INSTABILITY:** 0

* Data given are the manufacturer's values for the solvent.

EXTINGUISHING MEDIA: Dry chemical, foam, carbon dioxide or water spray. Water may be ineffective to fight fire due to low flashpoint, but may be used to cool surrounding materials.

FIRE AND EXPLOSION HAZARDS: Flammable liquid. May accumulate static electricity. Dangerous fire and explosion hazard. Avoid heat, sparks, and flames. Vapors are heavier than air and may collect in low-lying areas or travel a distance along the ground to an ignition source and flash back. Xylene floats on water and may travel to an ignition source and spread fire. Container may rupture violently from pressure when heated. Thermal decomposition may form carbon oxides, hydrocarbons, isoprene derivatives, sulfur compounds, and other oxidation products.

15. FIREFIGHTING MEASURES (continued)

FIRE FIGHTING INSTRUCTIONS: Firefighters should wear a NIOSH-approved, full-facepiece self-contained breathing apparatus (SCBA) operated in positive pressure mode and full turnout or bunker gear with additional chemical protective clothing as necessary to protect against thermal decomposition products. Continue to cool fire-exposed containers until well after flames are extinguished. Move containers from fire area if it can be done without risk. Dike run-off waters from firefighting for later disposal.

6. ACCIDENTAL RELEASE MEASURES

Immediately extinguish all ignition sources and isolate area of spill. No smoking, sparks, flares or flames in hazard area. Stop or control the leak if it can be done without risk. Wear appropriate personal protective equipment (See Section 8) and deny entry to unauthorized and unprotected personnel. Use water spray or vapor suppressing foam as necessary to control vapors. Absorb small amounts in suitable inert sorbent material and carefully scoop or shovel into clean, dry, tightly closed container for later disposal. Dike well ahead of large spills for later recycle or disposal. Prevent entry into waterways and sewers. Run-off to sewer may cause fire or explosion. Use clean, non-sparking tools to collect spilled materials.

7. HANDLING AND STORAGE

Store in cool, dry, well-ventilated area. Handle and store as a flammable liquid. Detached storage is preferred. Storage containers should be clearly labeled, kept upright and tightly closed.

Use only in well ventilated areas. Keep away from oxidizers, incompatible materials, heat, and other ignition sources. There should be no source for accidental ignition in work and storage areas. Immediately close containers after use. Use non-sparking tools. Five-gallon and larger containers should be grounded and/or bonded before pouring or otherwise transferring material. Cement may become electrostatically charged during mixing, filtering or pumping at high flow rates. Sufficient charges may cause sparks that can ignite vapors. Sudden release of hot organic mists or vapors from process equipment operating at elevated temperature and pressure or sudden entry of air into vacuum equipment may cause ignition without presence of obvious ignition sources. Evaluate all elevated temperature processes thoroughly to maintain safe operating conditions.

Empty containers may contain flammable product residue and vapors and should be handled and stored appropriately. Do not heat, cut, or weld on or near empty containers. Do not re-use containers unless properly cleaned and re-conditioned. Wear appropriate protective equipment. Use proper handling procedures for any ingredients added to this product.

Avoid skin and eye contact. Do not inhale. Intentional concentration and inhalation of vapors can be harmful or fatal. Do not eat, drink, smoke, or apply cosmetics in work areas. Do not store personal items in work areas. Wash hands before eating, drinking, smoking, and breaks.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

RESPIRATORY PROTECTION: Under normal working conditions below acceptable exposure guidelines, none required. Respiratory protection is dependent upon conditions and magnitude of exposure. Select NIOSH-approved respirators in accordance with 29 CFR 1910.134.

SKIN PROTECTION: Protective polyvinyl alcohol gloves worn with additional protective clothing (boots, apron, etc.) as necessary to prevent irritation.

EYE PROTECTION: Protective goggles. Full-facepiece supplied air respirator for high concentrations.

ENGINEERING CONTROLS: General ventilation used in combination with local exhaust and enclosed processes as necessary to control air contaminants to at or below acceptable exposure guidelines.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	Black liquid
ODOR:	Sweet, aromatic (xylene)
BOILING POINT:	137.2 °C (279 °F)*
VAPOR PRESSURE:	9.000 mm Hg@ 68 °F*
LIQUID DENSITY:	0.870 kg/l @ 16 °C (7.250 lbs/gal @ 60 °F)*
SOLUBILITY IN WATER:	< 0.08%
SPECIFIC GRAVITY (H₂O = 1):	No Data
MELTING POINT:	- 47.7 °C (-54.0 °F)*
pH:	Essentially neutral
% VOLATILE:	> 75

* Chemical and physical properties are for the solvent in the cement/solvent mixture.

10. STABILITY AND REACTIVITY

STABILITY: Stable.

INCOMPATIBLE MATERIALS/CONDITIONS: Incompatible with strong oxidizers. Avoid heat, sparks, and flames.

HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition products depend upon conditions and may include various hydrocarbons, isoprene derivatives, sulfur compounds, carbon oxides and other oxidation products.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

INHALATION: High concentrations of solvents can cause respiratory irritation and CNS depression. An L₅₀ of 6,350 ppm/4 H has been cited for xylene (rat). Inhalation of 9150 ppm ethylbenzene caused death in 2 hours in mice.

SKIN: Repeated or prolonged contact may dry or defat the skin causing cracks and secondary infection. Sensitive individuals may develop dermatitis with repeated contact.

EYE: Ethylbenzene causes severe eye irritation at 2000 ppm and irritation becomes intolerable at 5000 ppm. Xylene causes less severe irritation (specific values were unavailable).

CHRONIC: Ethylbenzene has caused cancer in laboratory animals and is classified as a possible human carcinogen by IARC. In a 2-year ethylbenzene inhalation study (6 H/day; 5 days/week for 104 weeks), there was clear evidence of carcinogenic activity of ethylbenzene in male F344/N rats that inhaled 750 ppm ethyl benzene and some evidence of carcinogenic activity in female rats and in male and female B6C3F1 mice (at 750 ppm).

Rubber contains carbon black. Although release of these ingredients is not expected, repeated inhalation of carbon black can affect the lungs and may increase risks of developing cancer.

OTHER: Studies indicate that toluene may increase the risk of miscarriage and adversely affect fetal development. Ethylbenzene and xylene have caused birth defects at high concentrations in experimental animals; however studies are inconclusive.

12. ECOLOGICAL INFORMATION

Does not contain Class I or II ozone depleting substances. Ecotoxic effects are expected to resemble those seen in humans and test animals.

13. DISPOSAL CONSIDERATIONS

Recycle, reclaim and dispose of in accordance with applicable local, state and federal regulations. Dispose per CFR Part 261 and 262. Incineration may produce toxic gases.

14. TRANSPORT INFORMATION

DOT PROPER SHIPPING NAME: Adhesives, containing a flammable liquid
HAZARD CLASS: 3
IDENTIFICATION NUMBER: UN 1133
SHIPPING LABEL: FLAMMABLE LIQUID
PACKING GROUP: III

15. REGULATORY INFORMATION

WHMIS CLASSIFICATION: B3, D2A, D2B

SARA HAZARD CLASSES (dusts and fumes): Acute Health Hazard
 Chronic Health Hazard
 Fire Hazard

SARA TITLE III – SECTION 313 SUPPLIER NOTIFICATION: This product contains the following toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act (EPCRA) of 1986 and 40 CFR 372:

Chemical	CAS Number	% Weight
Xylene	1330-20-7	60-100
Ethylbenzene	100-41-4	5-10

SARA 304 (CERCLA): Xylene and ethylbenzene are reportable under CERCLA Section 304, Title III, with respective reportable quantities (RQs) of 100 and 1000 pounds.

CALIFORNIA PROPOSITION 65: This product contains ingredients known to the State of California to cause cancer, birth defects, or other reproductive harm.

16. OTHER INFORMATION

KEY:

ACGIH: American Conference of Governmental Industrial Hygienists
 C: Ceiling
 CAS: Chemical Abstracts Service
 DOT: Department of Transportation
 DSL: Domestic Substance List
 IARC: International Agency for Research on Cancer
 MSHA: Mine Safety and Health Administration
 NFPA: National Fire Protection Association
 NIOSH: National Institute for Occupational Safety and Health
 NTP: National Toxicology Program
 OSHA: Occupational Safety and Health Administration
 PEL: Permissible Exposure Limit
 SARA: Superfund Amendment and Reauthorization Act
 STEL: Short-Term Exposure Limit
 TDG: Transportation of Dangerous Goods
 TLV: Threshold Limit Value
 TSCA: Toxic Substances Control Act
 WHMIS: Workplace Hazardous Materials Information System

DISCLAIMER

The information in this MATERIAL SAFETY DATA SHEET should be provided to all who will use, handle, store, transport, or otherwise be exposed to this material. This information has been prepared for the guidance of plant engineering, operations and management, and for persons working with or handling this material. Cooper Industries/Crouse-Hinds Division believes this information to be reliable and up-to-date as of the date of publication, but makes no warranty that it is.