

1. PRODUCT AND COMPANY IDENTIFICATION

COMMON NAME:	319757-1		
CHEMICAL NAME:	Unvulcanized Neoprene Rubber Compound		
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
Neoprene CAS: 9010-98-4	40-60	None Established	None Established	No Data
Kaolin CAS: 1332-58-7	30-50	15 mg/m ³ (total) 5 mg/m ³ (respirable)	2 mg/m ³ * (respirable)	No Data
Carbon Black CAS No.: 1333-86-4	5-10	3.5 mg/m ³	3.5 mg/m ³	No Data
Polyether plasticizer CAS No.: 143-29-3	1-5	None Established	None Established	No Data
Magnesium oxide CAS: 1309-48-4	1-5	15 mg/m ³ (fume, total particulate)	10 mg/m ³	No data
Quartz CAS: 14808-60-7	0.1-1	[10 mg/m ³ / (%SiO ₂ +2) (resp.) [30 mg/m ³ / (%SiO ₂ +2) (total)	0.05 mg/m ³ (respirable)	No Data

* Value is for particulate matter containing no asbestos and < 1% crystalline silica.

OSHA Regulatory Status: Fumes from this material are classified as hazardous under OSHA regulations.

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Non-flammable black rubbery material. As supplied, release of ingredients is not expected as ingredients are bound in a polymer matrix. Repeated or prolonged skin contact may cause allergic skin reactions in workers sensitive to neoprene rubber. Hot product may cause thermal burns. Irritating dusts and fumes may be produced during vulcanization or other processing operations. Equipment malfunction or overheating can produce toxic fumes that can be harmful or fatal. Use adequate ventilation in processing areas.

POTENTIAL HEALTH EFFECTS

EYE: None known for solid material. Hot product may cause thermal burns. Fumes released during normal processing may cause irritation.

SKIN: Repeated contact may cause irritation and redness in workers allergic to rubber. Hot product may cause thermal burns.

INHALATION: Inadequate ventilation during processing operations may result in inhalation of fumes that may produce irritation, chest tightness, shortness of breath, nausea, dizziness, and headaches. Equipment malfunction or overheating may produce significant amounts of harmful fumes (See Section 11).

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". Fillers in this product contain small amounts of quartz, an ingredient classified as a confirmed human carcinogen by IARC and NTP and regulated under 29 CFR 1910.1200 by OSHA. This product also contains carbon black, a substance that is classified as a possible carcinogen by IARC and has caused cancer in experimental animals. These ingredients are bound, and release is not expected under normal conditions.

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

SIGNS AND SYMPTOMS: Processing fumes may cause eye and respiratory irritation.

TARGET ORGANS: Eyes, skin, respiratory system (processing fumes)

4. FIRST AID MEASURES

EYE CONTACT: If irritation occurs, flush eyes with lukewarm water for 15 minutes. If irritation persists, get medical attention. If heated rubber comes in contact with the eyes, get immediate medical attention.

SKIN: Remove contaminated clothing and wash skin thoroughly with soap and water. If irritation persists, seek medical attention. If skin comes in contact with heated rubber, immediately immerse the affected area in cold water and obtain medical attention. DO NOT attempt to remove product as damaged skin may tear easily.

INHALATION: Acute exposure is not anticipated. If fumes from heated product are inhaled, immediately remove to fresh air. If breathing problems occur, administer oxygen or artificial respiration as indicated. All symptoms should be treated as potentially harmful. Get immediate medical attention.

OTHER: Not expected. Major ingredients are not highly toxic; however, no data is available for polymerized rubber. Consult a physician.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

FLASH POINT: Non-Flammable

FLAMMABLE LIMITS: LEL: No Data UEL: No data

NFPA HAZARD CLASSIFICATION:

HEALTH: 1 **FLAMMABILITY:** 1 **INSTABILITY:** 0

EXTINGUISHING MEDIA: Water, dry chemical, or protein-type dry air foam. Carbon dioxide may be unsuitable as the lack of cooling capacity may result in reignition.

FIRE AND EXPLOSION HAZARDS: Not flammable but may be difficult to extinguish once ignited. Direct water stream on molten material may spatter or spread fire. Release of significant quantities of fine powders or dusts from this product may cause a dust explosion. Fire may produce irritating, toxic, or flammable decomposition products including hydrogen chloride, sulfur compounds, aldehydes, organic acids, carbon oxides, chloroprene and other oxidation products.

5. FIRE FIGHTING 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.

6. ACCIDENTAL RELEASE MEASURES

Solid material does not require special control measures. Sweep, shovel, or otherwise recover and place in closed containers for later reuse or disposal. If spillage occurs during processing, isolate hazard area and wait for material to cool before recovering. Processing fume condensates that form on ductwork, exhaust hoods and other surfaces are combustible and may contain toxic components. Periodically remove condensates to prevent accumulation. Wear appropriate personal protective equipment (See Section 8).

7. HANDLING AND STORAGE

Store below 70 °F away from direct sources of heat and sunlight. Provide adequate ventilation during processing. Equipment malfunction, increasing processing temperature or other improper procedures may result in the formation of irritating, toxic, or flammable decomposition products. Do not heat rubber without adequate control measures. Use proper handling procedures for any ingredients added to this product.

Small amounts of N-nitrosodiethylamine and N-nitrosodibutylamine may be formed during processing and curing neoprene. (Contact with some nitrogen compounds may produce hazardous levels – See Section 10). These substances are carcinogenic and have been associated with reproductive, teratogenic, and mutagenic effects in experimental studies. Use appropriate control measures.

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. Processing equipment may contain toxic decomposition residues. DO NOT USE PROCESSING EQUIPMENT TO HEAT FOOD.

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 gloves. Wear gloves with thermal protection when processing.

EYE PROTECTION: Safety glasses or goggles are recommended. Wear full-facepiece supplied air respirator for fumes.

ENGINEERING CONTROLS: General ventilation. Use local exhaust ventilation and enclosed processes as necessary to control processing dusts and fumes when heating.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	Black rubbery solid
ODOR:	Characteristic (rubber)
BOILING POINT:	Not Applicable
VAPOR PRESSURE:	Negligible
LIQUID DENSITY:	No Data
SOLUBILITY IN WATER:	Negligible
SPECIFIC GRAVITY (H₂O = 1):	1.50
MELTING POINT:	No Data
pH:	Essentially neutral
% VOLATILE:	0

10. STABILITY AND REACTIVITY

STABILITY: Stable.

INCOMPATIBLE MATERIALS/CONDITIONS: Incompatible with strong oxidizers and strong acids. Do not overheat. Neoprene rubber may produce nitrosamines during hot processing or when in contact with nitrates, nitrites, nitrogen oxides or nitrosamines. Salt bath curing (using nitrate/nitrite salts) may produce hazardous amounts of volatile nitrosamines.

HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition products depend upon conditions and may include hydrogen chloride, sulfur compounds, aldehydes, organic acids, carbon oxides, chloroprene and other oxidation products.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

INHALATION: Processing fumes may cause irritation. Equipment failure and overheating may cause partial decomposition. The composition of the fumes released is determined by the conditions. Chlorine compounds emitted from neoprene may be highly irritating and can damage the lungs.

SKIN: Sensitive individuals may develop dermatitis with repeated contact.

EYE: Processing fumes may cause irritation.

CHRONIC: Rubber contains carbon black and small amounts of quartz. Although release of these ingredients is not expected, repeated inhalation of carbon black and quartz over time can cause lung disease and increase the risks of developing cancer.

Repeated over-exposure to n-nitrosamines during curing processes may adversely affect the fetus, reproductive system and increase the risks of developing cancer.

OTHER: No Data

12. ECOLOGICAL INFORMATION

Does not contain Class I or II ozone depleting substances. Ecotoxicity information for complex mixture was unavailable. Not expected to be highly mobile or biodegrade readily due to low water solubility.

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: Not defined as a hazardous material

15. REGULATORY INFORMATION

WHMIS CLASSIFICATION: D2B, D2A (dusts, fumes)

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

SARA TITLE III – SECTION 313 SUPPLIER NOTIFICATION: This product does not contain 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.

SARA 304 (CERCLA): As supplied, this product does not contain chemicals subject to reporting to the National Response Center under CERCLA, Section 304, SARA Title III.

15. REGULATORY INFORMATION (continued)

CALIFORNIA PROPOSITION 65: This product contains ingredients known to the State of California to cause cancer.

TSCA/DSL: All ingredients are listed on the U.S. Toxic Substances Control Act (TSCA) inventory, exempt from listing or sold under an exemption.

16. OTHER INFORMATION

KEY:

ACGIH:	American Conference of Governmental Industrial Hygienists
C:	Ceiling
CAS:	Chemical Abstracts Service
DOT:	Department of Transportation
DSL:	Domestic Substances 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.