

INDIANAPOLIS COMPOUNDS

MATERIAL SAFETY DATA SHEET

MSDS Number: 703b

Effective Date: 01/22/04

Product Name: IC 4728 B

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SECTION I - PRODUCT IDENTIFICATION

Product Name:	IC 4728 B
Synonyms:	EPR, EPDM, Ethylene Propylene Rubber, Ethylene Propylene Diene Rubber
Product Use:	Component of Cable Construction
Chemical Family:	Mixture
Manufacturer:	Indianapolis Compounds
Address:	7950 Rockville Road
City:	Indianapolis
State:	Indiana
Zip:	46122
Emergency/Other:	(317) 273-2908
Effective Date:	01/22/04

SECTION II - HAZARDOUS INGREDIENTS

INGREDIENT NAME	CAS No.	%	EXPOSURE LIMITS
Polymer	Mixture	60-70	As Nuisance Dust: 15 mg/m ³ total dust, 0.5 mg/m ³ respirable fraction (OSHA PEL TWA) 10 mg/M ³ of total dust (ACGIH TLV TWA)
Kaolin	66402-68-4	25-30	15mg/M ³ total dust, 0.5 mg/M ³ respirable fraction (OSHA PEL TWA) 10 mg/M ³ of total dust (ACGIH TLV TWA)
Dicumyl Peroxide	80-43-3	<3	Not Listed (OSHA PEL TWA) Not Listed (ACGIH TLV TWA)
Lead Compound	1314-41-6	<3	.05 mg/M ³ (as Pb) (OSHA PEL TWA) .15 mg/M ³ (ACGIH TLV TWA)
Zinc Compound	1314-13-2	<3	15 mg/M ³ (dust), 5 mg/M ³ (resp.fract.) (OSHA PEL TWA) 5 mg/M ³ (fume), 10 mg/M ³ (dust) (ACGIH TLV TWA)
Parrifin Wax	64742-43-4	<3	Not Listed (OSHA PEL TWA) 2 mg/M ³ (fume) (ACGIH TLV TWA)

Additional Information

This material is not expected to present unusual hazard under normal conditions of use. Ingredients of this mixture are encapsulated into the polymer matrix and are not expected to present the same exposure effects as in the neat state of the chemical. Should significant vapors/fumes be generated during thermal processing of this product, it is recommended that workstations be monitored for the presence of thermal degradation by-products, which may evolve at elevated temperatures. It is recommended that the current ACGIH-TLV's for these materials be observed.

SECTION III - HAZARD IDENTIFICATION

Emergency Overview: Hazards described herein may exist if material is in a fume or dust state. May cause eye and skin irritation. Airborne dust in high concentrations may form explosive air-dust mixtures. Organic fumes may be present in air spaces of shipping containers that may be irritating if inhaled and may cause irritation to eyes, respiratory tract, and skin. Contact with crosslinking by-products may cause allergic skin reaction. This material can burn in fire releasing toxic vapors, gases, and fumes.

Relevant Routes of Exposure: Inhalation, Eye or Skin Contact

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SECTION III - HAZARD IDENTIFICATION

Signs and Symptoms of Acute Overexposure:

Irritation of eyes, skin & respiratory tract. Release of detectable amounts organic vapors during the processing of the product may occur. Exposures to high concentrations of organic vapors may have a narcotic effect.

Medical Conditions Generally Aggravated By Exposure:

Individuals with chronic respiratory disorders may be adversely affected by any fume or airborne particulate exposure. Sensitive individuals may be susceptible to allergic reaction upon contact with skin, eyes, or respiratory tract. Breathing of organic vapor and/or mist may aggravate asthma and inflammatory or fibrotic pulmonary disease.

Potential Health Effects:

Eyes:

Dust or particulate may cause irritation or scratch the surface of the eye. Fumes from heated material may be irritating.

Skin:

Prolonged handling or rubbing of polymer pellets may cause mechanical skin irritation similar to exposure to sand or dust. Molten polymer can cause severe thermal burns. Organic byproducts generated from the heating of this material may cause skin irritation.

Ingestion:

None Known

Inhalation:

Exposures to dusts and fumes may cause irritation to the respiratory tract. Prolonged exposures at high concentrations could cause nausea, drowsiness, and headache.

Carcinogenicity:

NTP:

No

IARC:

Lead - 2B

OSHA:

No

ACGIH:

ACGIH has listed lead as an animal carcinogen - A3

OTHER:

No

Additional Information

Persons should avoid breathing dust or fume that may be generated during the handling and processing of this product. When processing this compound into a thermoset polymer, detectable amounts of byproducts of acetophenone, tert-butyl alcohol, dimethylbenzyl alcohol, alpha methyl styrene, 2-methoxyethanol and other organic vapors may be generated. Avoid breathing vapors in excess of threshold limit values. This mixture has not been tested as a whole for all potential hazards or health effects.

SECTION IV - FIRST AID MEASURES

Eyes:

Treat dust exposure as foreign particulate matter. Flush with water for at least 15 minutes. Contact a physician if discomfort persists. For thermal eye burns, immediately flush the eyes with water for several minutes. Get immediate medical attention without delay.

Skin:

Wash off in flowing water or shower. If molten material contacts skin, cool the skin rapidly with water. See a physician immediately without delay for removal of any adhering material and treatment of burn.

Ingestion:

Unlikely to occur due to physical state of its manufactured form. If ingested, seek medical attention.

Inhalation:

Avoid breathing dust or fumes that may be generated during the processing of this polymer. If breathing is difficult, remove to fresh air and seek medical attention.

Notes to Physicians and/or

Not expected to present hazard to physicians or first-aid

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SECTION IV - FIRST AID MEASURES

Protection for First-Aiders: responders. Treatment of overexposure should be directed at the control of symptoms and the clinical condition of the patient.

SECTION V - FIRE FIGHTING PROCEDURES

Flammable Limits in Air (% by Volume): Not Flammable

Flash Point: N/A

Autoignition Temperature: Not Determined

Extinguishing Media: Water, Foam, Dry Chemical

Fire Fighting Instructions: Do not direct a solid stream of water into burning molten polymer due to possibility of spattering and spread of fire. Firefighters and others exposed to products of combustion should wear self contained breathing apparatus (SCBA) as hazardous by-product gases may be formed if material temperature exceeds 290 °C.

Flammability Classification: Class A (Ordinary Combustible)

Known or Anticipated Hazardous Products of Combustion: Toxic gases may be released if heated to thermal decomposition temperatures.

SECTION VI - ACCIDENTAL RELEASE MEASURES

Accidental Release Measures: At ambient temperatures, no special procedures are required for clean-up of this material beyond those for safe handling identified in this document. In case of spill, place material in disposal containers. Dispose of only in accordance with local, state, and federal regulations.

Personal Precautions: Wear necessary respiratory protection and protective clothing to avoid breathing fumes, dust, or smoke from a release.

Environmental Precautions: This material should be recovered from aquatic environments. Avoid cleanup methods that result in releases to water. In the event of finely divided material or solutions being spilled on the ground in excess of EPA or State reportable quantities, the appropriate authorities should be contacted. Dispose of waste in accordance with federal, state, and local regulations.

SECTION VII - HANDLING AND STORAGE

Handling: Local exhaust ventilation should be used in polymer processing and confined areas to control potentials of airborne dust, fumes, or vapors. Use appropriate personal protective equipment when handling to avoid contact with eyes, skin, and clothing. Avoid continued, prolonged, or repeated breathing of fumes or vapors. Do not taste, swallow, or chew this material.

Storage: Store at any ambient temperature.

Other Precautions: Avoid contact with flame or high heat source that may initiate combustion.

SECTION VIII - EXPOSURE CONTROLS & PERSONAL PROTECTION

Engineering Controls: General ventilation is normally sufficient to control potential exposures from fumes or dusts.

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SECTION VIII - EXPOSURE CONTROLS & PERSONAL PROTECTION

Ventilation Requirements: Local exhaust ventilation is recommended in restricted or confined spaces.

Personal Protective Equipment:

Eye/Face Protection: Use of suitable eye protection is recommended to prevent eye contact.

Skin Protection: Avoid unnecessary prolonged skin contact. If prolonged or repeated contact is likely, gloves and/or protective clothing should be worn.

Respiratory Protection: Use NIOSH approved respiratory protection if unable to control dusts or fumes.

Work Hygienic Practices: Good personal hygiene practices are recommend. Wash hands thoroughly after handling, especially before eating, smoking or using toilet facilities. Do not store or consume food in processing area.

SECTION IX - PHYSICAL & CHEMICAL PROPERTIES

Appearance: Polymer Pellets, Rubbery in Texture

Boiling Point: N/A

Color: Orange

Decomposition Temperature: >290 °C.

Evaporation Rate Basis: N/A

Melting Point: N/A

Odor: Sweet pungent odor may be detectable

Odor Threshold: <1 ppm for organic by-products

Physical State: Solid

Reactivity in Water: Not Reactive

Softening Point: 130 °C.

Solubility in Water: Insoluble

Specific Gravity or Density (Water=1): 1.2

Vapor Density: N/A

Vapor Pressure: N/A

Viscosity: Not Visc.

SECTION X - STABILITY AND REACTIVITY

Stability: Stable at normal temperatures and storage conditions.

Conditions to Avoid: Temperatures above 260 °C.

Incompatibility With Other Materials: May react upon contact with strong acids or strong oxidizing agents.

Hazardous Decomposition Products: Thermal decomposition may generate hazardous gases that may include carbon monoxide, carbon dioxide, and organic vapors. Carbon monoxide is highly toxic if inhaled; carbon dioxide in sufficient concentrations can act as an asphyxiant. Acute overexposure to organic vapors may result in irritation of the eyes, skin, and respiratory tract.

Hazardous Polymerization: Will not occur at normal processing temperatures.

SECTION XI - TOXICOLOGICAL INFORMATION

Toxicological Information: As a mixture, this product has not been tested as a whole for potential toxicological effects. This material is not expected to have any toxicological effects.

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SECTION XII - ECOLOGICAL INFORMATION

Ecological Information: Precautions should be taken to prevent releases to water. Some forms of polymers have been known to be mistaken by certain species of marine life as a food source.

SECTION XIII - DISPOSAL CONSIDERATIONS

Disposal Considerations: If this material is discarded in its manufactured form, this material is not a RCRA hazardous waste in its own right. Re-evaluation of the product may be required by the user at the time of disposal, since the product uses, transformations, and mixtures may change the waste classification.

SECTION XIV - TRANSPORT INFORMATION

U.S. DOT

Proper Shipping Name: In its manufactured form as a cable component, this material is not a hazardous material or hazardous substance as defined by the Department of Transportation.

AIR - ICAO OR IATA

Proper Shipping Name: In its manufactured form as a cable component, this material is not a dangerous good as defined by the International Air Transport Association.

WATER - IMDG

Proper Shipping Name: In its manufactured form as a cable component, this material is not a dangerous good as defined by the International Maritime Organization.

SECTION XV - REGULATORY INFORMATION

U.S. Federal Regulations: This product may contain the following chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right To Know Act of 1986: Lead Compound <3% CAS# 1314-41-6, Zinc Compound <3% CAS# 1314-13-2. All ingredients of this cable component are on the TSCA Inventory or are exempt from TSCA Inventory requirements.
CERCLA RQ for Lead: 10 pounds. For Zinc: 1,000 pounds

State Regulations: CALIFORNIA PROPOSITION 65: WARNING: This product contains lead, a chemical known to the State of California to cause developmental and reproductive toxicity.

SARA Hazards:

Acute:	Yes
Chronic:	Yes
Reactive:	No
Fire:	No
Pressure:	No

Additional Information

The listing of regulations relating to an Indianapolis Compounds product or product component may not be complete or current, either alone or when contaminated with or mixed with other material, and should not be solely relied upon for end user regulatory compliance responsibilities. Other local, state, federal, and international regulations may also apply.

SECTION XVI - OTHER INFORMATION

NFPA Codes:

Health:	1
Flammability:	1
Reactivity:	0
Other:	N

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SECTION XVI - OTHER INFORMATION

HMIS Codes:

Health:	1
Flammability:	1
Reactivity:	0
Protection:	A,E

Label Statements: Routes of Entry: Inhalation, Skin or Eye Contact
Health Hazard: Irritant
Physical Hazards: No Physical Hazards
Target Organs: Eyes, Skin, Respiratory System

Additional Information

The opinions expressed herein are those of qualified experts within Indianapolis Compounds based on available data from material suppliers as of the date of preparation of this Material Safety Data Sheet. However, no warranty or representation, expressed or implied, is made as to the accuracy or completeness of the foregoing data and safety information. Since the use of this information and these opinions and the conditions of use of the product are not within the control of Indianapolis Compounds, it is the user's obligation to determine the conditions of safe use, safe handling, and safe disposal of the product.