

INDIANAPOLIS COMPOUNDS

MATERIAL SAFETY DATA SHEET

MSDS Number: 702b

Effective Date: 02/23/05

Product Name: Insulation Shield Compound

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SECTION I - PRODUCT IDENTIFICATION

Product Name:	Shield Compound
Tradenames & Synonyms:	IC 566 A, IC 567 A, IC 766 B
Product Use:	Component of Cable Construction
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
Ethylene-Vinyl Acetate CoPolymer	24937-78-8	50-65	5 mg/M3 respirable dust 15 mg/M3 total dust (based on OSHA PEL for nuisance dust)
Carbon Black	1333-86-4	30-40	3.5 mg/M3 (OSHA PEL TWA) 3.5 mg/M3 (ACGIH TLV TWA)
Peroxide	Mixture	1-3	50 mg/M3 (OSHA PEL TWA) 50 mg/M3 (ACGIH TLV TWA)
Anti-oxidant	Trade Secret	<2	5 mg/M3 respirable dust 15 mg/M3 total dust (based on OSHA PEL for nuisance dust)
Vinyl Acetate	108-05-4	<0.3	Not Established (OSHA PEL TWA) 10 ppm (ACGIH TLV TWA) 15 ppm (ACGIH STEL)

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. This material can burn in fire releasing toxic vapors, gases, and fumes.

Relevant Routes of Exposure: Inhalation, Eye or Skin Contact

Signs and Symptoms of Acute Overexposure: Irritation of eyes, skin & respiratory tract.

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 from contact with skin, eyes, or respiratory tract.

Potential Health Effects:

Eyes:

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

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SECTION III - HAZARD IDENTIFICATION

Skin:	Though not expected to present significant skin irritation under normal conditions of use, prolonged exposure may cause slight irritation. Rubbing may cause irritation similar to sand or dust. Burns may occur from melted material.
Ingestion:	May cause choking if swallowed. Single dose oral toxicity is believed to be low.
Inhalation:	Exposures to dusts or fumes may cause irritation to the respiratory tract. Prolonged exposures at high concentrations could cause nausea, drowsiness, or headache.
Carcinogenicity:	
NTP:	No
IARC:	Carbon Black - Group 2B Vinyl Acetate - Group 2B
OSHA:	No
ACGIH:	Vinyl Acetate - A3
OTHER:	MAK: Vinyl Acetate - B

Additional Information

When the polymer is melted or heated to melt temperatures, decomposition of the peroxide may generate acetophenone, cumyl alcohol, and alpha-methylstyrene. These by-products will produce a sweet pungent odor detectable by human olfactory senses at 0.3 ppm. Acetophenone may accumulate in the headspace of shipping containers in quantities lower than the ACGIH recommended exposure limit of 10 mg/M3 (ACGIH TLV TWA).

SECTION IV - FIRST AID MEASURES

Eyes:	Treat as foreign particulate matter. Flush with water for at least 15 minutes. Contact a physician if discomfort persists.
Skin:	Wash off in flowing water or shower. If molten material contacts skin, cool the skin rapidly with water or ice. See a physician for removal of any adhering material and treatment of burn.
Ingestion:	Do not chew pellets or place in mouth. If ingested, seek medical attention.
Inhalation:	Avoid breathing elevated concentrations of dust or fumes that may be generated during the processing and heating of this material. If breathing is difficult, remove to fresh air and seek medical attention.
Notes to Physicians and/or Protection for First-Aiders:	Not expected to present hazard to physicians or first-aid 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:	>240 °C.
Extinguishing Media:	Water, Foam, Dry Chemical, CO2
Fire Fighting Instructions:	Do not direct a solid stream of water into burning molten polymers due to possibility of spattering and spread of fire. Firefighters and others exposed to smoke and products of combustion should wear Self Contained Breathing Apparatus (SCBA) and protective clothing.

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SECTION V - FIRE FIGHTING PROCEDURES

Flammability Classification: Class A (Combustible)

Known or Anticipated Hazardous Products of Combustion: This material may decompose at temperatures over 240 °C. Thermal decomposition may release acrid smoke and irritating fumes. May also produce vinyl acetate, acetic acid, acetophenone, alpha-methylstyrene, cumyl alcohol, methane, and carbon monoxide.

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: Avoid cleanup methods that result in releases to water. Dispose of waste in accordance with federal, state, and local regulations.

SECTION VII - HANDLING AND STORAGE

Handling: Avoid continued, prolonged, or repeated breathing of elevated levels of fumes, vapors, or dusts. Do not taste, swallow, or chew this material. Use appropriate personal protective equipment when handling polymer pellets.

Storage: Keep containers closed. Store in a cool, well-ventilated place away from ignition sources.

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.

Ventilation Requirements: Local exhaust ventilation is recommended in 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: 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: Plastic in Pellet Form

Boiling Point: N/A

Bulk Density: 45 lbs./cf

Color: Black

Decomposition Temperature: > 240 °C.

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SECTION IX - PHYSICAL & CHEMICAL PROPERTIES

Heat Value: (BTU/hr./sq. ft.) EVA Content Average: 112,947 Peak: 368,671
Polyethylene Content Average: 98,270 Peak: 255,660

Melting Point: 40 to 90 °C. (DSC Method)

Molecular Weight: Not Determined

Molecular/Chemical Formula: Mixture

Odor: Slight Vinegar Odor at room temperature.
Sweet pungent odor when heated.

Odor Threshold: < 1 ppm

Percent Volatile: < 1

pH Value: N/A

Physical State: Solid

Reactivity in Water: Not Reactive

Softening Point: 40 to 90 °C.

Solubility in Water: Not Soluble

Specific Gravity or Density (Water=1): 1.1 - 1.2

Vapor Pressure: N/A

Viscosity: Not a liquid

Volatile Organic Compounds: < 1%

Weight Per Gallon: N/A

SECTION X - STABILITY AND REACTIVITY

Stability: Stable at normal temperatures and storage conditions.

Conditions to Avoid: This material will decompose at temperatures over 240 °C. Avoid contact with flame or high heat source that may initiate combustion.

Incompatibility With Other Materials: Avoid contact with strong acids, oxidizing agents and fluorine.

Hazardous Decomposition Products: This material may decompose at temperatures over 240 °C. Thermal decomposition may release acrid smoke and irritating fumes. May also produce acetophenone, alpha-methylstyrene, cumyl alcohol, methane, ethane, phenols and carbon monoxide.

Hazardous Polymerization: Will Not Occur

SECTION XI - TOXICOLOGICAL INFORMATION

Toxicological Information: When handled in its manufactured pellet form, this material is not expected to have any toxicological effects. As a mixture, this product has not been tested as a whole for potential toxicological effects.

Vinyl Acetate is found in this mixture in trace quantities. Vinyl Acetate is a slight skin and severe eye irritant, and a weak skin sensitizer in animals. No effects from repeated exposure to vinyl Acetate by inhalation were observed at 100 ppm in rats. Exposure to higher concentrations by inhalation caused eye irritation and lacrimation, reduced weight gain, and irritation of the respiratory tract with breathing difficulty. The effects observed in rats and mice exposed by inhalation to 200 and 600 ppm for two years include reduced body weight, and pathological changes in the nose and respiratory tract. Nasal cavity tumors were observed in rats but not in mice. Research on the mechanism of nasal tumor induction in rats suggests that levels at which humans are likely to be exposed are below the threshold for effects that contribute to tumor formation. Vinyl Acetate is not a developmental toxin in animals. Its effect on reproduction in animals is not considered significant. Genetic damage was produced in

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SECTION XI - TOXICOLOGICAL INFORMATION

some types of cell cultures and in animals, but was negative in other studies.

Vinyl Acetate:

LC50 4 hour inhalation:	4000 ppm in rats
LD50 skin absorption:	2335 mg/kg in rabbits
LD50 oral:	2920 mg/kg in rats

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.

Preferred options for disposal are: (1) Recycling, (2) incineration for energy recovery, and (3) Landfill. This material has a high BTU value which makes option 2 very desirable for material that cannot be recycled. Treatment, storage, and disposal of waste product must be in accordance with applicable government regulations.

SECTION XIV - TRANSPORT INFORMATION

U.S. DOT

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

WATER - IMDG

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

SECTION XV - REGULATORY INFORMATION

U.S. Federal Regulations: The U.S. EPA defines plastic pellets as a "significant material" under the Clean Water Act (40CFR 122.26) which requires any industrial plant that may expose pellets to storm water to obtain a storm water permit. Pellets found in storm water runoff are subject to EPA regulations with the potential for fines and penalties.

This product contains the following chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right To Know Act of 1986:
Vinyl Acetate (<0.3%) CAS# 108-05-4

TSCA: All ingredients of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements.

State Regulations: Review Locally with State Authorities

SARA Hazards:

Acute:	Yes
Chronic:	Yes

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SECTION XV - REGULATORY INFORMATION

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

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.