

# MATERIAL SAFETY DATA SHEET

 **SUMITOMO ELECTRIC INTERCONNECT PRODUCTS, INC.**

## Section 1: Identification

**Material Name** SumiMark SM3 Super Ribbon  
**Description** Polyester coated one side with Black ink  
**Emergency Phone**  
**Mailing Address**  
**Date** 30-May-08

## Section 2: Composition

	CAS#	OSHA VPEL TWA-ppm	OSHA VPEL STEL-ppm	ACGIH TLV TWA-ppm	ACGIH TLV STEL-ppm
Polyethylene Terephthalate backing	25038-59-9	10 ( total dust)			
Coloring Material Carbon Black	1333-86-4	3.5		3.5	
Wax					
Resin additive					

## Section 3: Hazards Identification

( Based on Backing )

No known health hazards at ambient temperature.

High temperature operations using polyester films can produce fumes or vapors of decomposition products of polyethylene terephthalate and isophthalate polymer. The type and quantity will vary based on time, temperature and other variables. Eye, nose, throat or respiratory irritation, or other effects, such as headache may result from exposure to such fumes and vapors.

Molten polymer can cause thermal burns.

Exposure to components used as fillers is not likely as these are encapsulated in the polymer and fully incorporated into the film.

**INHALATION:** No specific intervention is indicated as the Black Ink is not likely to be hazardous by inhalation.

However, if exposed to fumes from overheating or combustion, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician if necessary.

**SKIN CONTACT** The Black Ink is not likely to be hazardous by skin contact but cleansing the skin after use is advisable.

If molten material gets on skin, cool rapidly with cold water. Do not attempt to remove material from skin. Obtain medical treatment for thermal burn.

Document Code:

<b>EYE CONTACT</b>	In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.
<b>INGESTION</b>	Ingestion is not an expected route of exposure during normal use of the product. If ingested, consult a physician.
<b>NOTES TO PHYSICIANS:</b>	Prolonged eye irritation may occur from pieces of debris sticking to the eyeball or eyelids.

#### Section 4: First-Aid Measures

<b>Inhalation</b>	Consult physician if necessary. If exposed to fumes from overheating or combustion, move to fresh air. Consult physician if symptoms persist.
<b>Skin</b>	Not likely to be hazardous to skin but cleansing the skin after use is advisable.
<b>Eye</b>	If occurs, immediately flush eyes with saline solution for at least 15 mins. Call physician.
<b>Ingestion</b>	Not likely to occur, however, consult physician if necessary.

#### Section 5: Fire-Fighting Measures

<b>Flammability:</b>	If non- metalized, the film can remain combusted only by direct contact with flame. If flame source is stationary, non-metalized films will shrink away and self-extinguish. Non-metalized film remaining in contact with flame can remain burning, slowly and drip flaming liquid which can spread fire. Metalized films may support combustion if ignited.
<b>Degradation Products:</b>	Hazardous gases/vapors produced in fire are carbon dioxide, carbon monoxide, organic acids, aldehydes, sulfur oxides. Other hydrocarbon vapors.
<b>Explosivity:</b>	During processing, film may pick up a strong static charge. Avoid discharge into dust or solvent laden air as a flash fire or resulting in explosion
<b>Extinguishing Media:</b>	Water, Foam, Dry Chemical, CO2.
<b>Fire Fighting Instructions:</b>	Keep personnel away from area and upwind of fire. Fire fighters should wear self-contained breathing apparatus and full protective equipment.

#### Section 6: Accidental Release

<b>Spill/Leak Procedure</b>	Due to the physical nature of this material, not expected. Should material be released, pick up to prevent slipping hazard.
<b>Protective Equipment</b>	
<b>Respiratory</b>	Where concentrations can exceed indicated exposure limits, a NIOSH approved respirator should be selected based on the concentration of contaminant in air and in accordance with OSHA's Respiratory Protection Standard. Self contained breathing apparatus recommended under emergency where thermal decomposition is occurring. See Section # 5 .
<b>Skin</b>	If contact with molten/hot material is possible, wear heat resistant clothing and footwear. Special clothing not needed for normal use.
<b>Eyes</b>	Wear safety glasses. If using heated material, wear coverall splash goggles.
<b>Waste Disposal</b>	Dispose in accordance with local, state and federal regulations

## Section 7: Handling & Storage

**Handling** Wash Hands thoroughly after handling  
**Storage** Store in a cool, dry area away from heat, sparks and flames.

## Section 8: Exposure Controls & Personal Protection

**Ventilation** General exhaust is acceptable except where overheating can occur during processing. High temperature operations may require use of local exhaust ventilation to keep employee exposure below recommended limits.

Movement of film over metal or rollers will produce a surface static charge on the film. Consider processing design and procedures that will reduce or dissipate this charge, and eliminate the possibility of unwanted electrical discharge to people, equipment and materials.

**Eye Protection** Wear safety glasses. If using heated material, wear coverall splash goggles.

**Skin Protection** If contact with molten/hot material is possible, wear heat resistant clothing and footwear. Special clothing not needed for normal use.

**Respiratory Protection** Where concentrations can exceed indicated exposure limits, a NIOSH approved respirator should be selected based on the concentration of contaminant in air and in accordance with OSHA's Respiratory Protection Standard.

## Section 9: Physical & Chemical Properties

(Based on Backing)

**Form:** Transparent film  
**Color:** Black Film tape  
**Odor:** Negligible  
**Melting Point :** ~260 C (~500 F) (PET base film - co extrusion layer or coatings may melt at lower temperatures)  
**Solubility in Water:** Insoluble  
**Specific Gravity :** N/A  
**Vapor Pressure:** Negligible @ 20 C (68 F)

## Section 10: Stability & Reactivity

(Based on Backing)

**Stability** Stable at normal temperatures and storage conditions.  
**Incompatibilities** Strong acids and bases.  
**Decomposition Temp:** >300 C  
**Potential Decomposition Prods.** Carbon oxides and hydrocarbon oxidation products including terephthalic acid, organic acids, aldehydes, alcohols.  
**Hazardous Polymerization** Not expected

## Section 11: Toxicological Information

Carbon Black 1333-86-4 IARC animal Carcinogen

**Section 12: Ecological Information**

**Aquatic Toxicity** Insoluble

**Section 13: Disposal**

**Disposal** Dispose of in accordance with state and local regulations.

**Section 14: Transport Information**

**United States Dept. of Transportation:** Non regulated

**Section 15: Regulatory Information**

See abpve

**Section 16: Other Information**

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Note: This product is considered an "article" under OSHA regulations; specifically, 29 CFR 1910.1200 (b)(6)(v), which exempts articles from the Hazard Communication requirements and therefore does not require that a Material Safety Data Sheet be provided for this product, however it is offered at the request of our customers.