

Material Safety Data Sheet

Black Monochrome Ribbon

SECTION 1 *Product Identification and General Information*

Product Numbers: Black Monochrome Thermal Transfer Ribbon
Chemical Name: Black Monochrome Thermal Transfer Ribbon
Manufacturer: IIMAK
Product Information: 716-691-6333 (contact Chief R&D Chemist)
Emergency Phone Number (24 Hour): Chemtrec 1-800-424-9300 (for chemical emergencies)
Date MSDS Prepared: 7/23/2009
Date MSDS Revised: 11/10/2011

SECTION 2 *Hazards Identification*

Health Hazard Information (Acute and Chronic):

This product is not considered or classified as hazardous to man or the environment under normal conditions of use. These products are articles as defined by OSHA 29CFR 1910.1200, Canadian WHMIS and the EC Directives, including CE 1907/2006 REACH

Risk Phrases – Not Required

Safety Phrases – Not Required

Appearance: Product consists of inks and resins coated on plastic film and wound onto a plastic or cardboard core.

Potential Hazards: None currently known or expected. The form and intended use of this product should prevent the release of the hazardous components into the air and creating a hazard.

Inhalation: This material is not considered an inhalation hazard.

Ingestion: Although ingestion is unlikely, this material would irritate the digestive tract.

Skin Contact: Skin irritation may occur from prolonged skin contact.

Eye Contact: May cause irritation and redness.

Medical Conditions Aggravated by Exposure: None currently known.

Cancer Information: Carbon black is the only constituent of the black ink product that is considered to be suspect or known carcinogen, as listed by the IARC. See Section 11, *Toxicological Information*. The IARC, NTP, or OSHA does not list the other constituents as carcinogens.

SECTION 3 *Composition/Information on Ingredients*

Contents	Percent by Weight	CAS No.	OSHA PEL	LISTED CARCINOGEN (IARC/OSHA/NTP)
Polyethylene Terephthalate	60% -70%	25038-59-9	N/A	No
Modified Hydrocarbon	10% – 30%	Various	Particulates Not Otherwise Regulated*	No
Waxes Synthetic Waxes	10% – 30%	Various	Particulates Not Otherwise Regulated*	No
EVA Copolymer	10% – 15%	24937-78-8	Particulates Not Otherwise Regulated*	No
Acrylic Resins	10% - 15%	Various	Particulates Not Otherwise Regulated*	No
Carbon Black	5% – 10%	1333-86-4	3.5 mg/m ³	IARC 2B (see Section 11)
			*Nuisance Dust – 15 mg/m ³ and Respirable Dust – 5 mg/m ³	

SECTION 4 *First-Aid Measures*

Eye Contact: Flush with copious amounts of water for at least 15 minutes. Seek medical attention.
Skin Contact: Wash thoroughly with soap and water.
Inhalation: Remove to fresh air. Get medical attention.
Ingestion: Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention.

SECTION 5 *Fire-Fighting Measures*

Flash Point: NA
Extinguishing Media: Water spray, foam, dry chemical, carbon dioxide
Special Fire Fighting Procedures: Wear normal fire fighting protective equipment, such as SCBA, in buildings or confined spaces.
Unusual Fire and Explosion Hazards: None
Hazardous Combustion Products: Burning may produce carbon dioxide, carbon monoxide, oxides of nitrogen, acetaldehyde, methane, ethane, ethylene, toxic gases, and smoke.

SECTION 6 *Accidental Release Measures*

Spill Procedure: Pick up and store as solid waste.

SECTION 7 *Handling and Storage*

There are no special storage or handling procedures required.

SECTION 8 *Exposure Controls/Personal Protection*

Eye Protection: It is a good industrial hygiene practice to minimize eye contact.
Respiratory Protection: No special respiratory protection required.
Ventilation: Provide sufficient mechanical ventilation.
Protective Clothing: Wear chemical-resistant gloves and protective clothing appropriate for the risk of exposure.
Work and Hygienic Practices: Eye wash and shower facility should be available. Practice good hygiene and maintain a clean work environment.

SECTION 9 *Physical and Chemical Properties*

Solubility: Neither inks nor plastic films are soluble in water.

SECTION 10 *Stability and Reactivity*

Stability: Stable
Conditions to Avoid: None
Incompatibility (materials to avoid): None known.
Hazardous Polymerization: Will not occur.

SECTION 11 *Toxicological Information*

In its Monograph Volume 65, issued in April 1996, the International Agency for Research on Cancer (IARC) re-evaluated carbon black and concluded that, "there is inadequate evidence in humans for the carcinogenicity of carbon black".

The carbon black used contains less than 0.1% of adsorbed PAHs (polynuclear aromatic hydrocarbons). In non-adsorbed form, some PAHs have been found to be carcinogenic in animal studies. No correlating carcinogenic effect, however, has been observed in humans due to exposure to carbon black. There are still ongoing scientific discussions on the relevance of tumorigenic response in rats to inorganic insoluble particles like carbon black. Many inhalation toxicologists believe that the tumor response observed in the referenced rat studies is species specific and does not correlate to human exposure. However, the IARC evaluation in Monograph 65 concluded that there is "sufficient evidence in experimental animal for the carcinogenicity of carbon black".

Other Information:

This product has been formulated to ensure that it complies with the RoHS Directive as per the European Union's RoHS Legislation (Directive 2002/95/EC).

SECTION 12 *Ecological Information*

No data available at this time.

SECTION 13 *Disposal Considerations*

Waste Disposal Method: Dispose of product in accordance with local, state, and federal regulations.

SECTION 14 *Transport Information*

US DOT or IATA/ICAO does not regulate these products as hazardous materials for transportation.

SECTION 15 *Regulatory Information*

USEPA SARA 311 Hazards Classification: N/A

USEPA SARA 313: This product does not contain chemicals subject to the reporting requirements under SARA Title III, Section 313.

Hazardous Substance (40 CFR 116): N/A

CERCLA Reportable Quantity: N/A

WHMIS Classification: Not a controlled product.

Toxic Substances Chemical Inventory (TSCA): This product (and/or all of its components) is in compliance with the U.S. EPA TSCA.

CEPA (Canadian DSL): This product (and/or all of its components) is listed or exempt from listing.

SECTION 16 *Other Information*

HMIS Hazard Rating: Health – 0; Fire – 1; Reactivity – 0

NFPA Hazard Rating: Health – 0; Fire – 1; Reactivity – 0

DISCLAIMER:

The information accumulated herein is believed to be accurate and represents the best data currently available. It is the user's responsibility to determine suitability of use. No warranty, expressed or implied, is made and IIMAK assumes no legal responsibility or liability resulting from its use. Materials comprising <1% by weight, or <0.1% by weight if the chemical is a carcinogen, are not listed herein.
