

MATERIAL SAFETY DATA SHEET

MSDS Number : 1164A

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Product Name : Matrix Black
Product use : Impact Printer Ribbons
Revision Date : 06/03/2006

1 COMPANY IDENTIFICATION

Company Name : Fullmark Manufacturing Bhd.
Address : NO.7, Jalan Firma 1, Kawasan Perindustrian Tebrau
81100, Johor Bahru, Johor, Malaysia
Telephone No. : (607) 3543500

Product Name : Matrix Black Ink
MSDS Number : 1164A
Product Use : Impact Printer Ribbons

2 COMPOSITION/INFORMATION ON INGREDIENTS

Ingredients:

Cas #	Chemical Name	Perc.
1333-86-4	I Lampblack, channel (Carbon Black)	I 2-10 %
112-80-1	I Oleic Acid, Red Oil (9-Octadecenoic Acid(z)-(9CI)	I 20-40 %
8002-43-5	I Complex combination of diglycerides of fatty acids linked to the choline ester of phosphoric (Lecithins)	I 2-10 %
65071-95-6	I Tall oil (Tall oil, Ethoxylated) EINECCS #236-146-6	I 20-40 %
61791-53-5	I Complex Mixture (Amines, N-Tallow Alkyltrimethylenedi-.oleates)	I 1-5%
6786-83-0	I C.I. Solvent Blue 4 44045:1 (1-Naphthalenemethanol, .alpha.,. alpha., bis (4,(dimethylamino)pheny1)-4- (phenylamino)-(9ci)	I 5-20 %
8005-02-5	I Nigrosine Base (C.I. Solvent Black 7) EINECCS #309-912-6	I 5-20 %

3 HAZARDS IDENTIFICATION

Route of Entry: Potential routes of exposure to this product are skin and eye contact, ingestion and inhalation

Target Organs: None known

Inhalation: Inhalation is an unlikely route of exposure for this product due to physical properties.

Skin Contact: Wash affected areas thoroughly with mild soap and water. Get medical attention if irritation develops or persists.

Eye Contact: Do not rub eyes. Immediately flush with large amounts of clean, warm water (low pressure) for at least 15 minutes or until particles are removed. If irritation persists get medical attention.

Ingestion: Ingestion may cause diarrhea or gastrointestinal irritation.

HMIS II -ratings (scale 0-4) : Health = 1, Fire = 1, Reactivity = 0
HMIS III - ratings (scale 0-4) : Health = 1, Fire = 1, Physical Hazard = 0
NFPA - ratings (scale 0-4) : Health = 1, Fire = 1, Reactivity = 0

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4 FIRST AID MEASURES

Inhalation : Inhalation is an unlikely route of exposure for this product. If irritation or other symptoms occur, remove to fresh air. Get medical attention if irritation persists.

Skin Contact: Wash affected areas with soap and water. Remove contaminated clothing. Get medical attention if irritation persists.

Eye Contact: Flush with plenty of water for 15 minutes, especially under eyelids. Get medical attention if irritation persists.

Ingestion: Do not induce vomiting. Consult a physician or poison control center immediately.

5 FIRE FIGHTING MEASURES

Flash Point: >360 F (COC)
Auto ignition Temperature: N/D F N/D C
LEL: N/D
UEL: N/D

Flammability Limits: Not applicable

Extinguishing Media: Foam, alcohol foam, CO2, dry chemical

Special Fire Fighting Procedures. Fight as volatile fire, Closed containers may explode when exposed to extreme heat. Keep away from areas exposed to fire.

Unusual Fire and Explosion Hazards: Keep containers closed tightly and store in a cool dry place when not in use. If soaked rags are not placed in containers half-filled with water, this material could cause spontaneous combustion.

Hazardous Decomposition Products: Thermal decomposition may yield carbon dioxide and/or carbon monoxide.

6 ACCIDENTAL RELEASE MEASURES

Small Spill: Construct temporary dikes of dirt, sand, or any appropriate readily available material to prevent spreading of the material.

Wearing the appropriate personal protective equipment designated in Section 8 move the leaking container to a containment area or rotate the container so that the opening is above the liquid level.

Absorb on diatomaceous earth or equivalent inert material. Shovel up and dispose of at an appropriate waste disposal facility according to current applicable laws and regulation's, and product characteristics at time of disposal.

Large Spill: Construct temporary dikes of dirt, sand, or any appropriate readily available material to prevent spreading of the material.

Wearing the appropriate personal protective equipment designated in Section 8, close or cap valves and/or block or plug hole in leaking container and transfer to another container.

Contain material as described above and call the local fire or police department for immediate emergency assistance.

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Environmental Precautions:

Water Spill: Use appropriate containment to avoid runoff or release to sewer or waterways.

Land Spill: Use appropriate containment to avoid runoff or release to ground

Release Notes: If spill could potentially enter any waterway, including intermittent dry creeks, contact the local authorities.

Comments: See Section 13 for disposal information and Section 15 for regulatory requirements. Large and small spills may have a broad definition depending on the user's handling system. Therefore, the spill category must be defined at the point of release by technically qualified personnel.

7 HANDLING AND STORAGE

Handling Precautions: Handling: Avoid eye and skin contact.

Storage Requirements: Do not store near open flame or sources of ignition. Do not store in high temperature storage. In case of fire, remove closed containers from areas exposed to the fire. Empty containers usually still hold residues of material and vapors. These must be considered hazardous and disposed of in accordance with proper handling procedures prescribed for hazardous chemicals.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls: If dust, vapors, or mists are generated, provide local exhaust ventilation to control airborne levels below exposure limit. All ventilation should be designed in accordance with OSHA standard (29 CFR 1910.94)

Protective Equipment: HMIS PP, C I Goggles, Gloves, Apron
Ventilation: General ventilation should be adequate for normal use. Use adequate mechanical (general and/or local) ventilation to maintain exposure levels below the exposure limits.

Respiratory Protection: None is required if adequate general ventilation is provided, if the exposure limits are exceeded use NIOSH/MSHA approved organic vapor and mist, supplied air or self contained breathing apparatus.

Skin Protection: Protective clothing to protect against splashing of liquids onto skin. Neoprene, Buna N, or polyethylene gloves should be worn to prevent prolonged contact.

Eye Protection: Use chemical splash goggles or other OSHA permitted safety glasses, if splashed are possible.

Exposure Guidelines/ Other Protective Equipment: None normally required.

Other: Work Hygienic Practices:

Facilities storing or using this material should be equipped with an eyewash facility and/or a safety shower. Good personal hygiene practices should always be followed.

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9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Liquid, Oily	Boiling Point:	
Physical State:	Liquid	Freezing/Melting Pt.:	
Odor:	Mild, Oily	Solubility:	
pH:	Not applicable	Spec Grav./Density	
Vapor Pressure:	Not applicable		
Vapor Density:	Heavier than air		

10 STABILITY AND REACTIVITY

Stability:	Stable under recommended storage conditions.
Conditions to avoid:	Avoid open flames, welding arcs or other high temperature sources which induce thermal decomposition and fire. Avoid strong acids or alkalis. Avoid long term contact with water.
Materials to avoid (incompatibil	Strong oxidizers
Hazardous Decomposition products:	May form carbon dioxide and/or carbon monoxide
Hazardous Polymerization:	Will not occur

11 TOXICOLOGICAL INFORMATION

The ink formulation has not been tested.

Refer to Section 3 for potential health effects and Section 4 for first aid measures.

12 ECOLOGICAL INFORMATION

This product has not been tested for ecological effects.

13 DISPOSAL CONSIDERATIONS

Disposal Method: Dispose of waste at an appropriate waste facility according to current applicable laws and regulations.

For Large Spills: Contain material and call local authorities for emergency assistance. In consultation with the appropriate authorities, determine the disposal method.

Product Disposal: Dispose of at a supervised incineration facility or an appropriate waste disposal facility according to current applicable laws and regulations and product characteristics at time of disposal.

Empty Container: Rinse drums with a suitable solvent and steam to remove vapors before disposal or reuse in accordance with applicable regulations.

General Comment: Refer to Section 6, Accidental Release Measures for additional information.

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14 TRANSPORT INFORMATION

Not a regulated article under United States DOT, IATA, ADR, IMDG, or RID

Proper Shipping Name: Not applicable

Technical Name: Not applicable

UN Number: Not applicable

Hazard Class/Packing Group: Not applicable

Labels Required: None

15 REGULATORY INFORMATION

EPA SARA 311 Hazard Classification: Acute Health

EPA SARA 311 Chemicals: These products contain the following chemicals listed under SARA 313, however, would normally be covered by the article exemption and not subject to reporting: None

Hazardous Substance (40CFR 116) CERCLA: None

Reportable Quantity: Not applicable

EPA Toxic Substances Control Act (TSCA) Status: All the components of this product are listed on the TSCA inventory.

California Proposition 65: This product contains Carbon Black which is known to the state of California to cause cancer.

REGULATORY KEY DESCRIPTIONS

APP9 = Appendix 9
CERCLA = Superfund clean up substance
EPCRA WPC = EPCRA Water Priority Chemicals
HAP = Hazardous Air Pollutants
HWRCRA = RCRA Hazardous Wastes
MASS = MA Massachusetts Hazardous Substances List
NJHS = NJ Right-to-know Hazardous Substances
NRC = Nationally Recognized Carcinogens
OSHAHTS = OSHA Hazardous and Toxic Substances
OSHA WAC = OSHA Workplace Air Contaminants
PA = PA Right-to-know List of Hazardous Substances
PRIPOL = Clean Water Act Priority Pollutants
PROP65 = CA Prop 65
SARA313 = SARA 313 Title III Toxic Chemicals
TOXICPOL = Clean Water Act Toxic Pollutants
TOXICRCRA = RCRA Toxic Hazardous Wastes (U-List)
TXAIR = TX Air Contaminants with Health Effects Screening Level
TXHWL = TX Hazardous Waste List

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16 OTHER INFORMATION

Disclaimer:

Although reasonable care has been taken in the preparation of this document, we extend no warranties and make no representations as to the accuracy or completeness of the information contained herein, and assume no responsibility regarding the suitability of this information for the user's intended purposes or for the consequences of its use. Each individual should make a determination as to the suitability of the information for their particular purpose(s).

Explanation of abbreviations:

ACGIH	American Conference of Government Industrial Hygienists
CAS	Chemical Abstracts Service
CERCLA	Comprehensive Environmental Response Compensation and Liability Act
CFR	Code of Federal Regulations
COC	Cleveland Open Cup
DOT	Department of Transportation
EPCRA	Emergency Planning and Community Right-to-know Act (aka SARA)
IARC	International Agency for Research on Cancer
NIOSH	National Institute for Occupational Safety and Health
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
RCRA	Resource Conservation and Recovery Act
REC	Recommended
REL	Recommended Exposure Limit
SARA	Superfund Amendments and Reauthorization Act of 1986
STEL	Short-term Exposure Limit
TCLP	Toxicity Characteristics Leaching Procedure
TLV	Threshold Limit Value
TSCA	Toxic Substances Control Act
VOC	Volatile Organic Compounds

END OF MSDS DOCUMENT