

Material Safety Data Sheet

U.S. Department of Labor

May be used to comply with

Occupational Safety and Health Administration

OSHA's Hazard Communication Standard,

(Non-Mandatory Form)

29 CFR 1910.1200. Standard must be

Form Approved

consulted for specific requirements.

OMB No.1218-0072

IDENTITY(As Used on Label and List)

Ink Ribbon for Galileo

Note :Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.

Section I

Manufacturer's Name DAI NIPPON PRINTING CO.,LTD.	Emergency Telephone Number 042-952-9666
Address: 591-2, Kamihirose, Higashikubo, Sayama, Saitama, 350-1321 JAPAN	Telephone Number for information 042-952-9666
	Date prepared January 11, 1999
	Signature of Preparer (optional) <i>Hideichiro Takeda</i> Hideichiro Takeda / Mgr. of Technical Dept.

Section II - Hazardous Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s))	OSHA PEL	ACGIH TLV	Other Limits Recommended	%(optional)
Polyethylene terephthalate film (CAS No. 25038-59-9)				(49 ~ 54%)
Coating layer substances				
Carbon Black (CAS No. 1333-86-4)	3.5mg/m3	3.5mg/m3	None	(7~ 10%)
Ester Wax (CAS No. 8015-86-9)	-	-	None	(4~ 7%)
Paraffin Wax (CAS No. 8002-74-2)	-	2.0mg/m3	None	(7~ 14%)
Microcrystalline Wax (CAS No. 63231-60-7)	-	-	None	(13~ 20%)
Others	-	-	None	(4~ 11%)

Section III - Hazardous Ingredients/Identity Information

Boiling Point	Not applicable	Specific Gravity (H2O=1)	About 1.2
Vapor Pressure (mmHg)	Not applicable	Melting Point	71°C
Vapor Density (AIR = 1)	Not applicable	Evaporation Rate (Butyl Acetate=1)	Negligible

Solubility in water

Negligible

Appearance and Odor

Ink is black solid with slight acetic acid odor.

Section IV - Fire and Explosion Hazard Data

Flash point (Method Used) About 250°C for ink	Flammable Limits Not applicable	LEL Not applicable	UEL Not applicable
Extinguishing Media CO2, Water, Dry Chemicals, Foam			
Special Fire fighting Procedures For large quantities (i.e. truckload or pallet) involved in a fire, firefighters should wear self-contained breathing apparatus and protective clothing.			
Unusual Fire and Explosion Hazards None			

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OSHA 174, Sept. 1985

January 12, 1999

Section V - Reactivity Data

Stability	Unstable		Conditions to Avoid None
	Stable	<input type="radio"/>	

Incompatibility (Materials to Avoid)
None

Hazardous Decomposition or Byproducts
CO, CO₂, NO_x and H₂O etc.

Hazardous Polymerization	May Occur		Conditions to Avoid None
	Will Not Occur	<input type="radio"/>	

Section VI - Health Hazard Data

Route(s) of Entry:	Inhalation? No	Skin? No	Ingestion? possible but very unusual.
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Health Hazards(Acute and Chronic)
All the ingredients are negative mutagenic(Test species ;S. typhimurium)

Carcinogenicity:	NTP? No	IARC Monographs? Carbon Black : Group 2B	OSHA Regulated? No
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Signs and Symptoms of Exposure
None

Medical Conditions
Generally Aggravated by Exposure None

Emergency and First Aid Procedures
Not applicable

Section VII - Precautions for Safe Handling and Use

Steps to Be Taken in Case Material is Released or Spilled

Rumpling the product may cause the wax layer to peel off. Sweep up or vacuum. When sweeping , avoid raising film or dust. If a vacuum is used , motor should be rated as dust tight. Wash any residue off skin with soap and water. Garments may be wasted or dry cleaned after removal of loose film or dust.

Waste Disposal Method

Dispose by the same method of ordinary plastic products in accordance with all applicable regulations. Any disposal practice must be in compliance with local, state and federal laws and regulations. If necessary, contact government office and ensure conformity with disposal regulations.

Precautions to Be Taken in Handling and Storing.
No special precautions for safety reason.

Other Precautions
None

Section VIII - Control Measures

Respiratory Protection (Specify Type)
Not required

Ventilation	Local Exhaust No	Special No
	Mechanical(General) No	Other No

Protective Gloves
Not required

Eye Protection
Not required

Other Protective Clothing or Equipment
None

Work/Hygienic Practices
None

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