

MATERIAL SAFETY DATA SHEET

DAI NIPPON PRINTING CO.,LTD.

Mitsuru Sasaki

IDENTITY (As Used on Label and List)

ID-3BP (HPR) UL53 for ULTRA ELECTRONICS

SECTION 1

Manufacture's Name : DAI NIPPON PRINTING CO., LTD.

Address : 642-8 Mitsu-ugaki Okayama-city, Okayama 709-2121, JAPAN

Telephone Number for Information: 0867-24-3814

Emergency Telephone Number: 0867-24-3800

Data Prepared : January 21/2009

Signature of Preparer (optional) : *Yoshitomo Luakuma*

SECTION 2 -Hazardous Ingredient / Identity Information

Hazardous Components (Specific Chemical Identity: Common Name(S))	CAS No.	OSHA PEL	ACGIH TLV	Other Limits Recommended	%
Carbon Black	1333-86-4	3.5mg/m ³	3.5mg/m ³	-	Less than 0.5
Titanium dioxide	13463-67-7	10mg/m ³	10mg/m ³	-	-
Non-Hazardous Components (more than 1%)				CAS No.	%
Polystyrene				9003-53-6	66.5
Polyethylene-terephthalate				25038-59-9	25.1
Polyisocyanate				9046-75-7	1.6
Polyvinyl-alkylacetal				70775-95-0	1.3
Dye				-	0.8

SECTION 3 -Physical / Chemical Characteristics

Boiling Point :	NA	Specific Gravity(H2O=1) :	NA
Vapor Pressure(mmHg) :	NA	Melting Point :	NA
Vapor Density(AIR=1) :	NA	Evaporation Rate : (Butyl Acetate=1)	NA
Solubility in Water :	Insoluble (<1mg/1)		

Appearance and odor : Ribbon : 5Colors(Ye, Mg, Cy, rBk, OP), odorless

SECTION 4

-Fire and Explosion Hazard Data

Flash Point : NA Flammable Limits : NA
 Extinguishing Media : CO₂ , water
 Special Fire Fighting Procedures : None
 Unusual Fire or Explosion Hazards : None

SECTION 5

-Reactivity Data

Stability	Unstable		Condition to Avoid : None
	Stable	*	
Incompatibility (Material to Avoid) : None			
Hazardous Decomposition or Byproducts : CO , CO ₂ and NO _x			
Hazardous Polymerization	May Occur		Condition to Avoid : None
	Will Not Occur	*	

SECTION 6

-Health Hazard Data

Route(s) of Entry : Skin
 Health Hazards (Acute and Chronic) : No specific hazards under normal conditions.
 Carcinogenicity : NTP:No
 IARC Monographs:Carbon Black Group 2B
 OSHA Regulated:No
 Each of dyestuffs is negative for bacterial mutagenicity test.

In 1996 the International Agency for Research on Cancer(IARC) reevaluated carbon black as a group 2B carcinogen (possible human carcinogen) ,based upon the development of lung tumors in rats receiving chronic inhalation exposures to free carbon black. The effects were observed only in animals exposed to high concentrations of carbon black at levels that induce particle overload of the lung. Studies performed in animal models other than rats have not demonstrated an association between carbon black and lung tumors. Moreover, a two-year cancer bioassay using a typical toner preparation containing carbon black demonstrated no association between toner exposure and tumor development in rats.

Epidemiology studies of workers in the carbon black producing industries of North America and Western Europe do not demonstrate an association between carbon black and cancer, even in high exposure occupational setting. In addition, in its reevaluation of carbon black, IARC concluded that "there is inadequate evidence in humans for the carcinogenicity of carbon black. "Chronic over exposure to many dusts, including carbon black dust, may result in respiratory tract irritation and slight changes in lung function.

Signs and Symptoms of Exposure : None

Medical Condition Generally Aggravated by Exposure : None

Emergency and First Aid Procedures : Wash with soap and water.

SECTION 7 -Precautions for Safe Handling and Use

Steps to Be Taken in case Material is Released or Spilled : NA

Waste Disposal Method : Place in a suitable container for disposal
in accordance with corresponding laws.
(Follow all federal, state and local regulations in your country.)

Precaution to Be Taken in Handling and Storing : No special precautions

Other Precautions : None

SECTION 8 -Control Measures

Respiratory Protection : Not required

Ventilations	Local Exhaust : Not required	Special : Not required
	Mechanical : Not required	Other : Not required

Protective Gloves : Not required

Eye Protection : Not required

Other Protective Clothing or Equipment : Not required

Work / Hygienic Practices : Not required

NA : Not Available

NE : Not Established