

Product Name : Ricoh Priport Black Ink JP-12(AA/EU/LA) MSDS Number :  
817104



Date Prepared : 6/4/2006 Date Modified : 30/09/2008 Date : 29/10/2012

## Safety Data Sheet (ISO form)

### 1. Product and Company Identification

Product Name : Ricoh Priport Black Ink JP-12(AA/EU/LA)  
 General Use : The Image Formation in Digital Duplicator.  
 MSDS Number : 817104  
 Company Name : Ricoh Company,Ltd.  
 Department : Environment Safety Center, Corporate Environment Division  
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### 2. Composition/Information on Ingredients

Substance or Preparation

Preparation

Chemical Nature

Ingredients	Chemical Formula	CAS.No.	Contents(%)
Petroleum Solvent	Confidential	Confidential	20-25
Glycerol	C3H8O3	56-81-5	3-8
Carbon Black	C	1333-86-4	3-8
Sorbitan Oleate	C24H44O6	1338-43-8	2-7
Water	H2O	7732-18-5	58-78

This product does not contain any of the following substances as ingredients.

Cadmium, Hexavalent Chromium, Mercury, Lead, Polybrominated biphenyls (PBB), Polybrominated diphenylethers (PBDE).

And if it contains any impurities, it does not exceed any of the thresholds of RoHS.

Hazardous Ingredients Information

Chemical Name : Carbon Black

CAS Number : 1333-86-4

OSHA <sup>(29)</sup>/<sub>(1910)</sub> Z-Tables (USA) : 3.5mg/m3

NTP (USA) : Not listed

Symbol (EU) : Not listed

DFG-MAK : III 3B

California Proposition 65 (USA) : Listed

EEC Number : 215-609-9

ACGIH-TLV : 3.5mg/m3

IARC <sup>(68)</sup>/<sub>(Monographs)</sub> : Group 2B

R-Phrase (EU) : Not listed

OELs-TWA (Australia) : 3.0mg/m3

### 3. Hazards Identification

The Most Important Hazards

Adverse Human Health Effects

There are no significant hazards expected with intended use.

Environmental Effects

There are no significant hazards expected with intended use.

Physical and Chemical Hazards

There are no significant hazards expected with intended use.

Specific Hazards

There are no significant hazards expected with intended use.

#### Main Symptoms

##### Acute Inhalation Toxicity

Under normal use conditions, there is no possibility to inhale the particle of ink.

##### Acute Oral Toxicity

Low acute toxicity in animal experiment.

##### Acute Eye Irritation

May cause slight transient irritation.

##### Acute Skin Irritation

May cause slight transient irritation.

##### Sensitization

From test no apparent significant hazards are expected.

##### Chronic Effect

Under normal use conditions, there is no possibility to inhale the particle of ink.

##### Carcinogenicity

Carbon black contained in this product is classified to Group 2B of IARC as the result of inhalation test in use of rat.

This is due to the fact that rat alone showed lung tumor in the animal experiment under very high concentration.

During a normal use of this product, design of the cartridge proves it impossible to have powder carbon black released to the air.

Intake from the mouth and skin does not show carcinogenicity.

##### The Classification of The Chemical Product

This preparation is not classified as dangerous according to Directive 1999/45/EC

## 4.First-Aid Measures

### Inhalation

Remove from exposure into fresh air if symptoms are experienced. Seek medical advice.

### Skin Contact

Wash thoroughly with soapy water.

### Eye Contact

Flush with a large amount of water until particles are removed. Seek medical advice.

### Ingestion

Make him drink strong salt water, let him vomit. Seek medical advice.

### Notes to a physician

Not applicable

## 5.Fire-Fighting Measures

### Extinguishing Media

CO<sub>2</sub>, dry chemicals, foam or water.

### Extinguishing Media to Avoid

Not applicable.

### Specific Hazards

Not applicable

### Specific Method

No special fire protecting method is required. Sprinkling or fire extinguishers can be used.

### Protection of Fire-fighters

Wear gloves, glasses, a mask if necessary.

## 6.Accidental Release Measures

### Personal Precautions

Take off dirty clothes and wash them or have them dry-cleaned before wearing again.

### Environment Precautions

Do not exposure to sewers and watercourses.

### Methods for Cleaning Up

If spilled, wipe up with paper or cloth.

## 7.Handling and Storage

### Handling

#### Technical Measures/Precautions

Not applicable

#### Safe Handling Advice

Keep away from heat, flame or spark.

### Storage

#### Technical Measures

Not applicable

#### Storage Conditions

Keep out of reach of children.

For the sake of quality, store in dry and well-ventilated area it should not exceed 35 degrees centigrade for a long time and avoid direct sunlight.

#### Packaging Material

Not applicable

#### Specific Use(s)

The Image Formation in Digital Duplicator.

## 8.Exposure Controls/Personal Protection

### Technical Measures

Use adequate ventilation. None required with intended use.

### Control Parameters

USA OSHA PEL (TWA) : Not applicable

ACGIH TLV (TWA) : Not applicable

DFG MAK : Not applicable

**Personal Protection****Respiratory Protections**

None required in normal use.

**Hand Protection**

Use vinyl or rubber gloves if necessary.

**Eye Protection**

Put on goggles if necessary.

**Skin and Body Protection**

Wear chemical-resistant apron or other impervious clothing if necessary.

**Hygiene Measures**

Wash hands after handling.

## 9.Physical and Chemical Properties

**Appearance**

Physical State : Liquid

Form : Paste

Colour : Black

Odour : Slight oil smell.

**Information**

pH : Not available

Specific Temperatures/Temperature Ranges at Which Changes in Physical State Occur

Boiling Point (degrees centigrade) : Not available

Melting Point (degrees centigrade) : Not applicable

Decomposition Temperature (degrees centigrade) : Not applicable

Flash Point (degrees centigrade) : Not applicable

Explosion Properties (degrees centigrade) : This product is considered a nonexplosive material under normal use.

Vapor Pressure (Pa) : Not available      Measuring Temp (degrees centigrade) : -

Vapor : Not available

Density(AIR=1)

Density (g/cm3) : Approx.1.0      Measuring Temp (degrees centigrade) : 20

**Solubility**

Water Solubility (g/L) : Soluble

Petroleum solvent Solubility : Soluble

(g/L)

Octanol/Water Partition Coefficient

Not available

**Other Information**

Flammability : Not flammable

Viscosity (Pa<sup>sec</sup>) : Not available

Volatile (%) : 50-90

## 10.Stability and Reactivity

**Stability**

### Stable

Hazardous Reaction

There is no significant hazardous reaction expected with intended use.

Conditions to Avoid

Not applicable in normal use.

Materials to Avoid

Not applicable in normal use.

Hazardous Decomposition Products

Decomposition products will not occur.

## 11.Toxicological Information

Acute Toxicity

Acute Oral Toxicity (LD50) :

5000 or over [mg/kg] (Rat)

Acute Dermal Toxicity :

Not available

Acute Inhalation Toxicity :

Not available

Local effects

Acute Skin Irritation(PII) :

4.0 or below (Rabbit)

Acute Eye Irritation :

Not available (Ingredients are not classified as dangerous according to Directive 67/548/EEC.)

Sensitization

Acute Allergenic Effects :

Non-skinsensitive (Marmot)

Specific Effects

Carcinogenicity :

Carbon black contained in this product is classified to Group 2B of IARC as the result of inhalation test in use of rat.

This is due to the fact that rat alone showed lung tumor in the animal experiment under very high concentration.

During a normal use of this product, design of the cartridge proves it impossible to have powder carbon black released to the air.

Intake from the mouth and skin does not show carcinogenicity.

Mutagenicity : Negative (Ames test)

Reproduction Toxicity : Does not contain substances listed as hazardous to reproductive health.

## 12.Ecological Information

Mobility : No data are available on the adverse effect one environment.

Persistence/Degradability : Not available

Bioaccumulation : Not available

Ecotoxicity

Acute Toxicity for Fish (LC50) : Not available

Acute Toxicity for Daphnia (EC50) : Not available

Algae Inhibition Test (IC50) : Not available

## 13.Disposal Consideration

General information:

Dispose of waste and residues in accordance with local authority requirements.

Disposal methods:

Disposal recommendations are based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal. Confirm disposal procedures with local regulations.

Precautions:

Not applicable

## 14. Transport Information

### International Regulations

#### Land Transport

RID/ADR : Not applicable

DOT 49 CFR : Not applicable

ADNR : Not applicable

#### Sea Transport

IMDG Code : Not applicable

#### Air Transport

ICAO-TI/IATA-DGR : Not applicable

The UN Classification Number : Not applicable

Class : Not applicable

Specific Precautionary Transport Measures and conditions

Avoid direct sunlight in quality.

## 15. Regulatory Information

### Regulations

#### EU Information

Information on the label (1999/45/EC and 67/548/EEC)

Symbols & Indications : Not required

R-Phrase : Not required

S-Phrase : Not required

Special Precautions under 1999/45/EC Annex V : Not required

76/769/EEC

This product complies with applicable rules and regulations under 76/769/EEC

304/2003/EC

Not regulated

#### US Information

Information on the label : Not required

TSCA (Toxic Substances Control Act) :

This product complies with all applicable rules and regulations under TSCA.

SARA Title III

313 Reportable Ingredients : Not regulated

California Proposition 65 : Not regulated

Canada Information

WHMIS Controlled product : Not a controlled product

## 16. Other Information

NFPA Hazard Rating: National Fire Protection Agency (USA)

Health ; 1, Flammability ; 1, Reactivity ; 0

HMIS Rating : The National Paint and Coating Association (USA)

Health ; 1, Flammability ; 1, Reactivity ; 0

**Literature References :**

ANSI Z400.1-1993

ISO 11014-1

IARC (1996) "IARC Monograph on the Evaluation of the Carcinogenic Risk of Chemicals to Humans, Vol.65, Printing Process and Printing Inks, Carbon Black and Some Nitro Compounds", Lyon, pp149-261

H. Muhle, B. Bellman, O. Creutzenberg, C. Dasenbrock, H. Ernst, R. Kilpper, J.C. MacKenzie, P. Morrow, U. Mohr, S. Takenaka and R. Mermelstein(1991) "Pulmonary Response to Toner upon Chronic Inhalation Exposure in Rats" Fundamental and Applied Toxicology 17, pp 280-299

IARC (2008) "IARC Monograph on the Evaluation of the Carcinogenic Risk of Chemicals to Humans, Vol.93" NIOSH CURRENT INTELLIGENCE BULLETIN "Evaluation of Health Hazard and Recommendation for Occupational Exposure to Titanium Dioxide DRAFT"

- ACGIH-TLV : Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices
- OSHA Z-Tables : US Department of Labor, 29CFR Part 1910 , Tables Z-1, Z-2, and Z-3
- NTP (USA) : US Department of Health and Human Services National Toxicology Program Annual Report on Carcinogens
- DFG-MAK : DFG List of MAK and BAT Value
- Symbol (EC) : EU Directive 67/548/EEC
- 91/155/ EEC : EU Directive 91/155/ EEC
- 1999/45/EC Annex V : EU Directive 1999/45/EC
- 76/769/ EEC : EU Directive 76/769/ EEC
- EC 304/2003 : Regulation (EC) No 304/2003 of the European Parliament and of the Council of 28 January 2003 concerning the export and import of dangerous chemicals
- WHMIS Controlled product : Canada Workplace Hazardous Information System
- OELs-TWA (Australia) : Guidance Note on the Interpretation of Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC: 3008 (1995)]

**Abbreviations :**

- OSHA PEL PEL (Permissible Exposure Limit) under Occupational Safety and Health Act
- ACGIH-TLV TLV (Threshold Limit Values) under American Conference of Governmental Industrial Hygienists
- REACH (EC)No.1907/2006:Council Regulation concerning the Registration, Evaluation, Authorization and Restriction of Chemicals
- SVHC Substances of Very High Concern
- ECHA The European Chemicals Agency
- DFG-MAK MAK (Maximale Arbeitsplatz Konzentrationen) by Deutsche Forschungs Gemeinschaft
- RoHS Restriction of the use of certain Hazardous Substances in Electrical and Electronic Equipment
- TWA Time Weighted Average
- IARC International Agency for Research on Cancer
- NTP National Toxicology Program
- WHMIS Workplace Hazardous Information System
- NOHSC National Occupational Health and Safety Commission Act 1985

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