

**Material Safety Data Sheet**

in accordance with EC Directive  
91/155/EEC



**XEIKON PA Developer**

**1. Identification of the Substance and of the Company**

**1.1 Identification of the Substance or Preparation**

Developer PA Cyan	Product Code : 121016
Developer PA Magenta	Product Code : 121017
Developer PA Yellow	Product Code : 121018
Developer PA Black	Product Code : 121015

**1.2 Use of the Substance/Preparation :**

Magnetic marking material for XEIKON high speed digital colour Printer

**1.3 Manufacturer / Supplier Identification**

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**2.Composition / Information on Ingredients**

Substance or Preparation : Preparation

Ingredients Common Name CAS number	Content (%)	EINECS/ ELINCS	Symbol	R-Phrase
All developer formulations				
Polyol Resin 186359-26-2	<5	Not applicable	Not applicable	Not applicable
Organic Salt 42405-40-3	<1	- 403-360-0	F, Xn, N	R11, R22, R50/53
Ferrite Powder 1317-38-0	10-14	215-269-1 -	Not applicable	Not applicable
Ferrite Powder 1314-13-2	7-19	215-222-5 -	Not applicable	Not applicable
Ferrite Powder 1309-37-1	68-78	215-168-2 -	Not applicable	Not applicable
Colour Specific				
Organic Pigment Yellow 76199-85-4	<1	-	Not applicable	Not applicable
Organic Pigment Carbon Black 1333-86-4	<1		Not applicable	Not applicable
Organic Pigment 1 Magenta 980-26-7	<1	-	Not applicable	Not applicable
Organic Pigment 2 Magenta 5280-68-2	<1	-	Not applicable	Not applicable
Organic Pigment Cyan 147-14-8	<1	-	Not applicable	Not applicable

The full text of each relevant R phrase are listed at heading 16.

**3.Hazards Identification**

This preparation is not classified as dangerous according to Directive 1999/45/EC.  
 This preparation is not classified as dangerous according to Directive 76/769/EEC.

**Adverse Human Health Effects :**

May cause allergic skin reaction.

**Carcinogenicity :**

**Cyan, Yellow, Magenta developer :**

This product does not contain the carcinogenic substances which are listed in NTP, IARC and are regulated by OSHA

**Black developer :**

Carbon Black was reclassified as a Group 2B by IARC in 1996 based on the result of only the inhalation study in rats. However there was not observed the incidence of tumours on

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the test results on dermal or oral studies. Also 2-years inhalation study using a typical toner containing carbon black showed no association between toner exposure and animal tumours.

**Environmental Effects :**

Not applicable in normal use.

**Physical and Chemical Hazards :**

Not applicable in normal use.

**4.First Aid Measures**

Immediate medical attention is not required.

**Inhalation**

Gargle with water, move to place in fresh air. If unsuccessful, get medical attention.

**Skin Contact**

Wash thoroughly with soap and water.

**Eye Contact**

Immediately wash eyes with plenty of water. If unsuccessful, get medical attention.

**Ingestion**

Dilute stomach contents with several glasses of water. If unsuccessful, get medical attention.

**5.Fire Fighting Measures**

**Extinguishing Media**

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

**Specific Method**

Generally by sprinkling or extinguisher.

**Special Protective Equipment for Fire-Fighters**

Wear full bunker gear in case of burning in large quantities.

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**6. Accidental Release Measures**

**Personal Precautions**

Minimize inhalation of dust.

**Environment Precautions**

Keep product out of sewers and watercourses.

**Methods for Cleaning Up**

If spilled, sweep up or pick up by vacuum cleaner. Remove residue with soap and water.

**7. Handling and Storage**

**7.1 Handling (technical measures, precautions, safe handling material)**

Do not handle in areas where wind blows

Flying powder may enter eyes.

Minimize breathing dust.

**7.2 Storage (technical measures, storage conditions, packaging material)**

Avoid direct sunlight.

Do not keep this over 35 degrees centigrade.

Do not put on the ship's deck.

Keep out of reach of children.

**7.3 Specific Use(s)**

Only for XeiKon high speed digital X8000 series Colour Printers

**8. Exposure Controls / Personal Protection**

**8.1 Exposure Limit Values :**

not applicable

**8.2 Exposure Control :**

**8.2.1 Occupational Exposure Control**

**8.2.1.1 Respiratory Protection :**

None required under normal conditions of use.

**8.2.1.2 Hand Protection :**

No precautions should be needed under normal use.

**8.2.1.3 Eye Protection :**

None required under normal conditions of use.

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**8.2.1.4 Skin and Body Protection**

No precautions should be needed under normal use.

**8.2.2 Environmental Exposure Control :**

No precautions should be needed under normal use.

**9. Physical and Chemical Properties**

**9.1 General Information**

Form : Powder

Colour: Black, Dark Cyan, Dark Yellow or Dark Magenta (depending upon the developer formulation)

Odour : Slightly plastic odour

**9.2 Important Health, Safety and Environmental Information**

pH : not applicable Measuring Concentration(%) : -

Boiling Point(°C) : not applicable

Flash Point(C) : not applicable

Flammability : Not flammable

Explosion Properties : This product is considered a non explosive material under normal use condition.

Oxidising Properties : This product is considered a non oxidizing material under normal use condition.

Evaporation Rate(Butyl acetate=1): not applicable

Vapour Pressure(Pa) : not applicable Measuring Temp.(°C)

Vapour Density(AIR=1) : not applicable

Density (g/cm<sup>3</sup>) : approx.4,5 Measuring Temp.(°C) :25

Viscosity : not applicable Measuring Temp.(°C) : -

**Solubility**

Water Solubility (g/L) : Insoluble Measuring Temp.(°C) : -

Other Solvent name : not available

Other Solvent Solubility(g/L) : - Measuring Temp.(°C) : -

Octanol/Water Partition Coefficient: not available

**9.3 Other Information**

Melting pointy (°C) : not applicable

**10. Stability and Reactivity**

**10.1 Conditions to Avoid :**

Not applicable in normal use.

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Not applicable in normal use.

**10.3 Hazardous Decomposition Products :**

not applicable

**11. Toxicological Information****Acute Toxicity**

Acute Oral Toxicity (LD50) Rat : 5000 mg/kg or over

Acute Dermal Toxicity : not available

Acute Inhalation Toxicity : not available

**Sensitization**

Acute Skin Irritation (PII) : non-irritant (based on other product test results of similar ingredients)

Acute Eye Irritation : not available (ingredients are not classified as dangerous according to directive 67/548/EEC)

Acute Allergenic Effects : non-skin sensitive (based on other product test results of similar ingredients)

**Specific Effects****Carcinogenicity :**

In 1996 IARC reevaluated Carbon Black as a Group 2B carcinogen (possible human carcinogen). This evaluation is given to carbon black for which there is inadequate human evidence, but sufficient animal evidence. The latter is based upon the development of lung tumours in rats receiving chronic inhalation exposures to free 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 tumours. Moreover, 2-years cancer bioassay using a typical toner preparation containing carbon black did not demonstrate an association between toner exposure and tumour development in rats.

For other colours : No data available

**Mutagenicity :**

Negative (based on other product test results of similar ingredients)

**Effects on The Reproductive System :**

No data is available on this product.

**Teratogenic :**

not available

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Acute Toxicity for Fish (LD50) : not available (mg/l/96hr)  
Acute Toxicity for Daphnia (EC50) : not available (mg/l/48hr)  
Algae Inhibition Test (IC50) : not available (mg/l/72hr)

**12.2 Mobility :**

no data is available on the adverse effect on the environment

**12.3 Persistence / Degradability :**

not available

**12.4 Bioaccumulation Potential :**

not known in bioaccumulation

**12.5 Water Classification**

Classification according to the "Verwaltungsvorschrift wassergefahrende Stoffe"  
WGK 1: low hazard to waters

**12.6 Other Adverse Effects :**

Not available

**13. Disposal Consideration****Recommended Methods for Safe Environmentally Preferred Disposal:**

Used toner should be disposed of in an environmentally appropriate manner and in accordance with governmental regulations. Do not incinerate,

**14. Transport Information****International Regulations**

RID/ADR : not applicable  
DOT 49 CFR : not applicable  
ADNR : not applicable  
IMDG Code : not applicable  
ICAO TI/ IATA DGR : not applicable  
The UN Classification Number : not applicable

**Specific Precautionary Transport Measures**

Avoid direct sunlight. Do not keep this over 35 degrees centigrade. Do not put on the ship's deck.

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**Specific Materials to Avoid :**  
None in normal use.

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**15. Regulatory Information**

**Regulations**

This preparation is not classified as dangerous according to Directive 1999/45/EC.  
This preparation is not classified as dangerous according to Directive 76/769/EEC.

**Other regulation**

Not applicable

**16. Other Information**

**The full Text of R-Phrases Referred to under Heading 2 and 3 :**

R11:Highly flammable.

R22:Harmful if swallowed.

R50/53:Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**References:**

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, pp 149-'261

2)H.Muhle, B.Bellman, O.Creutzenberg, C.Dasenbrock, H.Emst, 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,pp280-299

**Note :**

The data given is based on the current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the product properties.