



SAFETY DATA SHEET

1	IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING
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Product name: InfoPrint 4100 Enhanced Printing Developer Version 2

Product No.: 69G7370

Synonyms: Company Chemical No.: 940058000

Supplier:
InfoPrint Solutions United Kingdom Limited
Ricoh House, 1 Plane Tree Crescent
Feltham, Middlesex TW13 7HG
United Kingdom
www.infoprint.com/uk

Emergency telephone:
1-760-476-3961; Access code: 333114

Intended use: Developer for use in InfoPrint printers

Contact person:
msdsinfo@infoprint.com

2	HAZARDS IDENTIFICATION
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This material is not considered to be hazardous according to regulatory guidelines (see Section 15).

Potential health effects

Inhalation: Respiratory tract irritation may occur with exposure to large amounts of dust.

Eye contact: Mechanical irritation of eyes.

Skin contact: Not known to InfoPrint Solutions Company as a dermal irritant or dermal sensitizer.

Ingestion: No harmful effects expected in amounts likely to be ingested by accident.

Other health effects: Chronic exposure may cause potential risk of irreversible pulmonary effects. Chronic exposure is highly unlikely when this product is used as intended.

Potential physical / chemical effects: This product is not flammable. Fine particles may form explosive mixtures with air.

Environment: No data available.

3	COMPOSITION/INFORMATION ON INGREDIENTS
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Chemical name	EC No.	CAS-No.	Concentration *	Classification	Notes
Manganese ferrite black spinel	269-056-3	68186-94-7	> 90%	-	-
Polyester resin		184851-83-0	0 - 6%	-	-
Polyester resin		148556-68-7	0 - 4%	-	-
Carbon black	215-609-9	1333-86-4	< 5%	-	-
Silicone resin		123127-08-2	0.1 - 1%	-	-

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4	FIRST-AID MEASURES
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Inhalation: If symptomatic, move to fresh air. Get medical attention if any discomfort continues.

Eye contact: Flush thoroughly with water. If irritation occurs, get medical assistance.

Skin contact: Wash skin with soap and water. Should dermal irritation or dermal sensitization occur, seek medical attention.

Ingestion: Rinse mouth thoroughly if dust is ingested. Get medical attention if any discomfort continues.

Note to physician: Get medical attention if symptoms occur.

5	FIRE-FIGHTING MEASURES
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Extinguishing media: Extinguish with foam, carbon dioxide, dry powder or water fog.

Inappropriate extinguishing media: None.

Special fire fighting procedures: Avoid dust formation.

Unusual fire & explosion hazards: Dust may form explosive mixture with air.

Hazardous combustion products: Carbon oxides, Manganese oxides, Silicone oxides, Unidentified organic compounds

Protective measures: Selection of respiratory protection for fire fighting: follow the general fire precautions indicated in the workplace.

6	ACCIDENTAL RELEASE MEASURES
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Personal precautions: Wear necessary protective equipment. See Section 8 for personal protective equipment.

Spill cleanup methods: Sweep or scoop up and remove. Avoid dust formation. Avoid sparks and prevent accumulation of electrostatic charges. Collect and dispose of spillage as indicated in section 13.

Environmental precautions: Avoid discharge into drains, water courses or onto the ground.

Notification procedures: Inform authorities if large amounts are involved.

7 HANDLING AND STORAGE

Handling: Avoid inhalation of dust and exposure to eyes and skin. Use with adequate ventilation. Wear necessary protective equipment. See Section 8 for personal protective equipment. Observe good industrial hygiene practices.

Storage: Store in closed original container in a dry place. Keep away from heat, sparks and open flame. Store away from incompatible materials. See Section 10 for incompatible materials.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limit values:

Chemical name	Source	Type	Workplace exposure limits	Notes
Carbon black	EH40/2005	STEL	7 mg/m ³	
Carbon black	EH40/2005	TWA	3.5 mg/m ³	
Manganese ferrite black spinel	EH40/2005	TWA	0.5 mg/m ³	as Mn

Engineering controls: Provide adequate ventilation.

Respiratory protection: No protection is ordinarily required under normal conditions of use and with adequate ventilation. During dust-raising work: If ventilation is insufficient, suitable respiratory protection must be provided.

Eye protection: If significant eye exposure is anticipated, the use of chemical safety goggles is recommended.

Hand protection: If significant skin exposure is anticipated, the use of protective gloves is recommended.

Skin protection: Protective clothing is not required under normal conditions.

Hygiene measures: Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

Environmental exposure controls: Environmental manager must be informed of all major spillages.

9 PHYSICAL AND CHEMICAL PROPERTIES

Physical state: powder

Colour: Black

Odour: Faint

Odour threshold: No data available.

pH: Not applicable

Melting point: >1400°C (2552°F)

Freezing point: Not applicable

Boiling Point: Not applicable

Relative density: No data available.

Vapour pressure: Not applicable

Vapour density (air=1): Not applicable

Evaporation rate: Not applicable

Solubility in water: Negligible

Solubility (other): No data available.

Partition coefficient (n-octanol/water): Not applicable
Viscosity: Not applicable
Volatile organic compounds (VOC): Not applicable
Flash point: Not applicable
Autoignition temperature: Not applicable
Flammability limit - lower(%): No data available.
Flammability limit - upper (%): No data available.
Explosive properties: No data available

10	STABILITY AND REACTIVITY
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Stability: Stable under normal temperature conditions.

Conditions to avoid: Heat, sparks, flames.

Incompatible materials: Strong oxidising agents.

Hazardous decomposition products:

At elevated temperatures:	Unidentified organic compounds
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Possibility of hazardous reactions: Will not occur.

11	TOXICOLOGICAL INFORMATION
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Inhalation: Low acute inhalation toxicity. As with exposure to high concentrations of any dust, irritation of the respiratory tract may occur. Persons with certain pre-existing upper respiratory disorders, such as bronchitis or asthma have an increased risk of irritation.

Eye contact: Mechanical irritation of eyes.

Skin contact: Not known to be a dermal irritant or sensitizer.

Ingestion: No harmful effects expected in amounts likely to be ingested by accident.

Sensitisation: None known.

Carcinogenicity: Pure carbon black, a minor component of this product, is not classified as hazardous when bound in toner polymers.

Listed carcinogens:

Chemical name	IARC	NTP	OSHA	ACGIH
Carbon black	2B	Not listed	Not listed	A4

IARC: 1 = Carcinogenic to Humans; 2A = Probably Carcinogenic to Humans; 2B = Possibly Carcinogenic to Humans; 3 = Not classifiable as to carcinogenicity to humans; 4 = Probably not carcinogenic to humans; Not listed = Not evaluated by IARC.

ACGIH: A1 = Confirmed Human Carcinogen; A2 = Suspected Human Carcinogen; A3 = Confirmed Animal Carcinogen; A4 = Not classifiable as a human carcinogen; A5 = Not suspected to be a human carcinogen; Not listed = Not evaluated by ACGIH.

Mutagenesis: No data available.

Reproductive toxicity: Not known.

Other effects: Not known.

12	ECOLOGICAL INFORMATION
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Ecotoxicity: No data available.

Mobility: The product is insoluble in water.

Persistence and degradability: No data available.

Bioaccumulation potential: No data available.

13	DISPOSAL CONSIDERATIONS
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General information: Dispose in accordance with applicable federal, state, and local regulations.

Disposal methods: No specific disposal method required.

European waste codes

Unused product: 08 03 99

14	TRANSPORT INFORMATION
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ADR/RID Not regulated.

IMDG Not regulated.

IATA Not regulated.

15	REGULATORY INFORMATION
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The product has not been classified as dangerous according to the legislation in force.

16	OTHER INFORMATION
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Wording of the R-phrases in sections 2 and 3: None

Inventory status: All ingredients are either listed or exempt from listing on EINECS/ELINCS.

Issue date: 23-Aug-2010

Supersedes date: 31-May-2010

SDS No.: 1014057

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