



SAFETY DATA SHEET

1	IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING
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Product name: InfoPrint 1532, 1552, 1570, 1572, 1650 Toner Cartridge **Product No.:** See synonyms

Synonyms: InfoPrint 1532, 1552, 1572 Return Program High Yield Toner Cartridge for Label Applications; InfoPrint 1570 MFP, 1572 MFP Extra High Yield Toner Cartridge; InfoPrint 1570 MFP, 1572 MFP Return Program Extra High Yield Toner Cartridge; InfoPrint 1570 MFP, 1572 MFP, 1650 MFP Return Program Toner Cartridge; InfoPrint 1572 Return Program Extra High Yield Toner Cartridge for Label Applications; InfoPrint 1570 MFP, 1572 MFP, 1650 MFP High Yield Toner Cartridge; InfoPrint 1570 MFP, 1572 MFP, 1650 MFP Toner Cartridge; InfoPrint 1570 MFP, 1572 MFP, 1650 MFP Return Program High Yield Toner Cartridge
Product No.: 39V1591, 39V0545, 39V0546, 39V0542, 39V1063, 39V0543, 39V0541, 39V0544
Company Chemical No.: 940252240

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: Toner 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: Short Term Effects: Respiratory tract irritation may occur with exposure to large amounts of dust. Long Term Effects: Chronic exposure may cause potential risk of irreversible pulmonary effects. Chronic exposure is highly

unlikely when this product is used as intended.

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: Carbon black has been classified by IARC in group 2B: Possibly carcinogenic to humans. For further information, please refer to section 11.

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
Polyester resin		Trade secret	65 - 85%	-	-
Iron oxide	215-277-5	1317-61-9	6 - 13%	-	-
Carbon black	215-609-9	1333-86-4	1 - 10%	-	-
Polymer wax		Trade secret	1 - 5%	-	-
Amorphous silica (modified)		Trade secret	1 - 3%	-	-

* 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: Dust in the eyes: Flush thoroughly with water. If irritation occurs, get medical assistance.

Skin contact: Wash with soap and water. Not known to InfoPrint Solutions Company as a dermal irritant or dermal sensitizer. 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.

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, 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

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. Avoid exposure to eyes, skin or clothing (will stain). Use with adequate ventilation. Avoid sparks and prevent accumulation of electrostatic charges. 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 container closed when not in use. Keep away from heat, sparks and open flame. Store away from 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	

Engineering controls: Provide adequate ventilation. Where there is a potential for eye exposure to this substance, an eye wash fountain should be provided within the immediate work area for emergency use.

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. Use respiratory equipment with particle filter, type P2. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

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

Hand protection: If significant skin exposure is anticipated, appropriate gloves should be worn to prevent skin contact with this substance.

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
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Physical state: powder
Colour: Black
Odour: Faint
Odour threshold: No data available.
pH: Not applicable
Melting point: No data available.
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: Insoluble
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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Specified substance(s)

Acute toxicity:

Chemical name	Test results
Carbon black	Oral LD50 (Rat): >15400 mg/kg
Carbon black	Dermal LC50 (Rabbit): >3000 mg/kg

Inhalation: Low acute inhalation toxicity. As with exposure to high concentrations of any dust, irritation of the respiratory tract may occur. Pure carbon black, a minor component of this product, has been listed by IARC as a group 2B (possible carcinogen). This classification is based on rat "lung particulate overload" studies performed with airborne

particulate carbon black. Toner is not listed by IARC, NTP, or OSHA. Industry tests on similar toner formulations showed no signs of overt toxicity. Microscopic examination of the lungs of rats exposed to high levels of toner showed a chronic inflammatory response and a mild to moderate degree of lung fibrosis. At airborne concentrations more relevant to potential human exposure, no evidence of toxicity to the respiratory tract were found. Carbon black: Predicted to be mildly irritating to the upper respiratory tract.

Eye contact: Dust in the eyes will cause irritation.

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: In 1996 the International Agency for Research on Cancer (IARC) reevaluated carbon black as a Group 2B carcinogen based upon the development of lung tumors in rats receiving chronic inhalation exposures of free carbon black. The effects were observed only in rats exposed to high concentrations of carbon black at levels that induce particle overload of the lung. Studies performed in animal models other than rats (i.e., mice, hamsters) 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.

In contrast to the IARC assessment, neither the Occupational Safety and Health Administration (OSHA) nor the American Conference of Governmental Industrial Hygienists (ACGIH) nor the National Toxicology Program (NTP) has listed carbon black as a carcinogen.

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 settings. In addition, in its reevaluation of carbon black, IARC concluded that "there is inadequate evidence in humans for the carcinogenicity of carbon black". Chronic overexposure to many dusts, including carbon black dust, may result in respiratory tract irritation and slight changes in pulmonary function.

Collectively, the available data from animal and human epidemiology studies suggest that carbon black, as contained in this product, does not present a cancer risk to the end user if the handling and personal protective measures contained within this MSDS are understood and followed.

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: Similar toner formulations were not mutagenic in a battery of in vitro genotoxicity assays including the Ames Salmonella/mammalian microsome mutation assay.

Reproductive toxicity: Not known.

Other effects: Persons with certain pre-existing upper respiratory disorders, such as bronchitis or asthma have an increased risk of irritation. Carbon black: Toxic overexposure may affect the respiratory system, skin, and mucous

membranes.

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 18

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.

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SDS No.: 1026225

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