

MATERIAL SAFETY DATA SHEET

ITEM ID: 940296220
Last Revision 2007-Jun-25

Yellow Toner Cartridge PN: 39V2210, 39V2214

SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

CHEMICAL PRODUCT NAME: InfoPrint Color 1767 Yellow Toner Cartridge

InfoPrint Color 1759 MFP & 1769 MFP Yellow Toner Cartridge

IBM Field Use Number: None

IBM Material Reference Number: 940296220

TRADE NAMES/SYNOMYMS:

CHEMICAL FAMILY: Toner for Printers

PRODUCT USE: Yellow High Yield Toner Cartridge for

InfoPrint Color 1759 MFP, 1767, 1769 MFP Laser Printers

IBM Corporation New Orchard Road

Armonk, New York 10504

U.S.A.

INTERNATIONAL EMERGENCY 1-303-739-1111

NUMBER

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PERSON:

CHEMICAL MANUFACTURER:

IBM Part Number(s)

DescriptionPart NumberYellow High Yield Cartridge for 176739V2210Yellow High Yield Cartridge for 1759 MFP & 1769 MFP39V2214

Creation Date: 2007-Jun-04 Revision Date: 2007-Jun-25

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Section 2 - Hazards Identification

The following information is based on testing of the product as a whole and/or characteristics of components.

Hazard Classification:

None

Routes of Entry and Potential Health Effects:

Inhalation:

Low acute inhalation toxicity. As with exposure to high concentrations of any dust, minimal irritation of the respiratory tract may occur. Exposure not probable with

intended use.

Skin Contact:

Not known as and dermal irritant or a dermal sensitizer

Eye Contact:

Toner may act as a mechanical irritant.

Ingestion:

Low acute oral toxicity. Exposure not probable with intended use.

Carcinogen Status:

IARC:

Y (Carbon Black)

NTP: N OSHA: N

ACGIH: N

Section 3 - Composition, Information on Ingredients

Component	Percent (wt.)	CAS Number	EINECS/ELINCS Number
	Classification	Symbol Letters	Risk Phrases
Styrene/Acrylate Copolymer	60-70	Trade Secret	
	None	None	None
Mn-Mg-Sr Ferrite Powder	10-20	Trade Secret	
	None	None	None
Polyolefin Wax	1-10	Trade Secret	
	None	None	None
Yellow Pigment	1-10	Trade Secret	
	None	None	None
Amorphous Silica	1-10	Trade Secret	
	None	None	None
Carbon Black	<1	1333-86-4	2156099
	None	None	None
Total	100 Percent		

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Section 4 - First Aid Measures

Inhalation: If symptoms, such as shortness of breath or persistent coughing are experienced,

remove source of contamination and move individual to fresh air. If symptoms

persist, seek medical attention.

. Wash with soap and water. Should irritation occur, seek medical attention. **Skin Contact:**

Eye Contact: Do not rub eyes. Flush immediately with plenty of water. Remove contact lenses

and continue flushing for at least 15 minutes. If irritation develops and persists, seek

medical attention.

Ingestion: Do not induce vomiting. Slowly dilute with 1-2 glasses of water or milk and seek

medical attention. Never give anything by mouth to an unconscious person.

Exposure to high airborne dust concentrations, including toner, may aggravate **Aggravated Conditions:**

existing respiratory conditions.

No specific antidote. **Notes to Physician:**

<u>Section 5 – Fire Fighting Measures</u>

Flash Point/Range (°C): Solid, Not Applicable Auto ignition Temperature (°C): Not Applicable Flammable Limits in Air UEL: Not determined Flammable Limits in Air LEL: Not determined

Suitable Extinguishing Media:

NOT Suitable Extinguishing

Media:

Hazardous Combustion

Products:

Special Exposure Hazards:

Special Protective Equipment:

Carbon dioxide, water spray or fog, dry chemical or foam

Carbon monoxide, carbon dioxide, unidentified organics

Like many finely divided materials, toner dust, in high concentrations can form an

explosive mixture in air which, if ignited, could result in a dust explosion.

Fire fighters should wear full protective clothing, including self-contained breathing

apparatus, if a large number of cartridges are involved.

<u>Section 6 - Accidental Release Measures</u>

Personal Precautions: None required for intended use in printer.

Disposal is subject to national, state, regional, or provincial regulations. **Environmental Precautions:**

Small Spill and Leak Sweep up and discard to a waste container.

Large Spill and Leak If a dust cloud is possible due to a spill, remove all sources of ignition such as open sparks, flames, or static discharge to prevent the ignition of the dust. Minimize dust

generation during clean up. Sweep up spill with non-metallic broom and dustpan. Contain for disposal. Oil permeated sweeping compound may be useful in cleaning

up spills.

Section 7 - Handling and Storage

Safe Handling: To avoid damage to cartridge and accidental contact with toner

KEEP OUT OF REACH OF CHILDREN.

Safe Storage: Store in a cool, dry place. Store away from oxidizing material.

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Section 8 - Exposure Controls / Personal Protection

Exposure Limits Carbon Black

3.5 mg/m3 OSHA TWA PEL

3.5 mg/m3 ACGIH TWA TLV - ACGIH A4 - Not classifiable as a human carcinogen

3.5 mg/m3 NIOSH recommended 10 hour TWA

0.1 mg/m3 NIOSH recommended 10 hour TWA (in the presence of polycyclic aromatic

hydrocarbons)

Measurement Method: Particulate filter; gravimetric; (NIOSH III # 5000).

European Union and Member State Occupational Exposure Limit Values:

Measurement Method:

Biological Limit Values: None

Recommended Monitoring

None

Procedures:

Occupational Exposure Controls

Engineering Controls: None required. Use in a well ventilated area.

Ventilation: Provide adequate ventilation.

Respiratory Protection:

Eye Protection:

None required for intended use in printer.

Protective Clothing:None required for intended use in printer.

None required for intended use in printer.

Other Protective Equipment: None

Environmental Exposure Controls:

Section 9 - Physical and Chemical Properties

Physical State:Solid powderMelting Point/Range (°C):Not determinedColor:YellowBoiling Point/Range (°C):Not applicableOdor:Faint plastic-like odorFreezing Point/Range (°C):Not applicablePressurized (Yes/No):NoEvaporation Rate:Not applicable

Specific Gravity: Not determined pH: Not applicable Solubility in Water: Not determined Insoluble % Volatiles (by weight): Solubility in Other: No Data Vapor Density (Air=1): Not applicable **Explosive Properties:** Not determined **Vapor Pressure:** Not applicable

Explosive Properties:Not determinedVapor Pressure:Not applicableOxidizing PropertiesNot determinedRelative Density:Not determinedViscosity:Not applicableFlammability (solid,gas)Not determined

Partition Coefficient Not applicable Flash Point (°C) (Closed Not determined

(n-octanol/water): Cup or Open Cup):

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Section 10 - Stability and Reactivity

Chemical Stability:

Stable

Hazardous Polymerization:

Will not occur

Conditions to Avoid:

High Temperatures and flame

Incompatibilities with Other

Strong oxidizers

Materials:

Hazardous Decomposition

Byproducts:

Carbon monoxide, carbon dioxide, unidentified organics.

Section 11 - Toxicological Information

Routes of Entry and Potential Health Effects:

Inhalation: Low acute inhalation toxicity. As with exposure to high concentration of any dust,

minimal irritation of the respiratory tract may occur.

Skin Contact: Not known as a dermal irritant or dermal sensitizer

Eye Contact: May cause irritation.

Ingestion: Low acute oral toxicity. Exposure not probable with intended use.

PRODUCT DATA (Toner Composition including Carbon Black)

Chronic Toxicity:

Acute Toxicity: Low acute inhalation toxicity. As with exposure to high concentrations of any dust,

irritation of the respiratory tract may occur.

Repeated Dose Toxicity:

No data available. No data available.

Reproductive Toxicity:

Not known as a dermal irritant or dermal sensitizer

Sensitization to Product: Irritancy of Product:

Not known as a dermal irritant or dermal sensitizer

Carcinogenicity:

Neither this product nor any of its components present above 0.1% are listed by

IARC, NTP, or OSHA as known carcinogens. Toner is negative in the Ames Assay.

Mutagenicity: Teratogenicity:

Toxicologically Synergistic

Products:

Toxicokinetics, Metabolism, and

Distribution:

Aggravated Conditions: Exposure to high airborne dust concentrations, including toner, may aggravate

existing respiratory conditions.

Toxicity Data: LD₅₀ (rat, oral): > 5000 mg/kg based on test results of similar toner

formulations

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CARBON BLACK (Alone)

Repeated Dose Toxicity:

Carcinogenicity:

Chronic Toxicity: 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 was found.

Acute Toxicity: 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.

Toxic overexposure may affect the respiratory system, skin, and mucous

membranes.

Reproductive Toxicity: No data available.

Sensitization to Product: Not known as a dermal irritant or dermal sensitizer.

Irritancy of Product: Not known as a dermal irritant or dermal sensitizer.

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.

Mutagenicity: Similar toner formulations were not mutagenic in a battery of *in vitro* genotoxicity

assays including the Ames Salmonella/mammalian microsome mutation assay.

Teratogenicity:
No data available.
Toxicologically Synergistic
No data available.

Products:

Toxicokinetics, Metabolism, and No data available.

Distribution:

At Increased Risk From Persons with certain pre-existing upper respiratory disorders, such as bronchitis or

Exposure: asthma.

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Toxicity Data: LD₅₀ (rat, oral): 15,400 mg/kg

LD₅₀ (rabbit, skin): 3,000 mg/kg (NIOSH RTECS #: FF5800000)

LC₅₀ (rat, inhalation): Not available; Predicted to be > 4.9 g/m³ based on test

results of similar toner formulations.

Section 12 - Ecological Information

Ecotoxicity: Not determined **Aquatic toxicity:** Not determined **Mobility:** Not determined Persistence and Degradability: Not determined **Bioaccumulative Potential:** Not determined Persistence, Bioaccumulative, Not determined

and Toxicity Assessment

Results:

Other Adverse Effects

Ozone Depletion Potential: Photochemical Ozone Creative Potential: Endocrine Disruption

Potential:

Global Warming Potential:

Section 13 - Disposal Considerations

Waste Disposal: This product is not a listed hazardous waste in accordance with Federal Regulation

40 CFR Part 261. If discarded in its purchased form, this product would not be a hazardous waste either by listing or by characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal whether a material has been contaminated and should be classified as a hazardous waste.

Disposal is subject to local, state and federal regulations.

Appropriate Disposal Method: Waste Management Measures:

Section 14 - Transport Information

Special Precautions: Not classified as a hazardous material or substance under US DOT.

UN Number: ADR/RID Class: **ICAO Number:** ADR/RID Item: ICAO/IATA Classification: Not applicable ADR/RID Labels:

ICAO Subrisks:

Proper Shipping Name:

ICAO Packaging Group:

Not applicable

Hazard Code: IMO Class: IMDG Page:

Not applicable

ICAO Labels:

Not applicable

IMO Subrisks:

IMO Packaging Group:

Not applicable

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Section 15 - Regulatory Information

NFPA Rating:

Health: 1 Flammability: 1 Reactivity: 0

HMIS Classification:

Health:1 Flammability:1 Reactivity: 0

Chemical Safety Assessment

Availability:

Label Information

Danger Symbol: Risk Phrases: Safety Phrases:

TSCA (USA): All ingredients are listed on the Toxic Substances Control Act (TSCA) inventory,

have been registered, or are exempt.

SARA / EPCRA (USA): None of the ingredients in this product has a final reportable quantity (RQ) under

Emergency Planning and Community Right-to Know Act (EPCRA) - Section 302: Extremely Hazardous Substances (EHS) or notification requirements for EHS under

Section 304.

California Proposition 65: This product contains no known materials at levels that the State of California has

found to cause cancer, birth defects or other reproductive harm - California

Proposition 65.

DSL (Canada): All ingredients are listed on the Canadian Domestic Substances List (DSL), have

been registered on the Non-Domestic Substances List (NDSL), or are exempt.

EINECS (Europe): All ingredients are listed on the European Inventory of Existing Commercial

Substances (EINECS) list, have been registered on the European List of New

Chemical Substances (ELINCS), or are exempt.

ENCS (Japan): All ingredients are listed on the Japanese Existing and New Chemical Substances

(ENCS) list, have been registered, or are exempt.

AICS (Australia): All ingredients are listed in Australian Inventory of Commercial Substances (AICS),

have been registered, or are exempt.

ECL (Korea): All ingredients are listed on the Korean Existing Chemicals List (ECL), have been

registered, or are exempt.

WHMIS Hazard Class (Canada): Not a WHMIS controlled product.

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Section 16 - Other Information

Reason for revision: Add Products 1759 MFP & 1769 MFP

Additional advice: None

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END OF MSDS

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