

1. Identification

Product identifier	InfoPrint 4247 Printer Ribbon, Black; InfoPrint 4247 L Series Printer Ribbon, Black; InfoPrint 4247 Models V03, X03, Z03 Series Printer Ribbon, Black	
Other means of identification		
Product code	1053685, 41U2235, 57P1743	
Synonyms	Company Chemical No.: 940075030	
Recommended use	Printer Ribbons for use in InfoPrint printers.	
Recommended restrictions	None known.	
Manufacturer / Importer / Supplier / Distributor information		
Company name	Ricoh Company Ltd.	
Address	6300 Diagonal Highway Boulder, Colorado 80301-9270 U.S.A.	
Telephone	1-866-213-4250	
Website	www.infoprint.com	
E-mail	msdsinfo@infoprint.com	
Emergency phone number	1-760-476-3961; Access: 333114	

2. Hazard(s) identification

Physical hazards	Not classified.	
Health hazards	Skin corrosion/irritation	Category 2
	Sensitization, skin	Category 1
Environmental hazards	Not classified.	
OSHA defined hazards	Not classified.	

Label elements



Signal word	Warning	
Hazard statement	Causes skin irritation. May cause an allergic skin reaction.	
Precautionary statement		
Prevention	Wash thoroughly after handling. Wear protective gloves. Avoid breathing dust/fume/gas/mist/vapors/spray. Contaminated work clothing must not be allowed out of the workplace.	
Response	If on skin: Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before re-use.	
Storage	Store away from incompatible materials.	
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.	
Hazard(s) not otherwise classified (HNOC)	None known.	

3. Composition/information on ingredients

Mixtures

Chemical name	CAS number	%
Oleic Acid	112-80-1	10-15
1,2,3-Propanetriyl trioleate	122-32-7	1-5
Carbon black	1333-86-4	1-5
Pigment black 1	75578-75-5	1-5

White mineral oil (petroleum)	8042-47-5	1-5
.alpha.,.alpha.-bis[4-(dimethylamino)phenyl]-4-(phenylamino)naphthalene-1-methanol	6786-83-0	<1
4-(Phenylazo)benzene-1,3-diamine	495-54-5	<1
Dispersing agent	164383-18-0	<1
Solvent Violet 8	52080-58-7	<1
Fungicide	98726-06-8	0.14
Naphtha (petroleum), hydrodesulfurized heavy	64742-82-1	<0.1

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

4. First-aid measures

Inhalation	If symptomatic, move to fresh air. Get medical attention if any discomfort occurs.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention immediately if symptoms occur.
Eye contact	Flush thoroughly with water. If irritation occurs, get medical assistance.
Ingestion	Rinse mouth thoroughly with water and give large amounts of milk or water, if person is conscious. Seek medical advice.
Most important symptoms/effects, acute and delayed	May cause sensitization by skin contact.

5. Fire-fighting measures

Suitable extinguishing media	Extinguish with foam, carbon dioxide, dry powder or water fog.
Unsuitable extinguishing media	None.
Specific hazards arising from the chemical	The product is not flammable. Fire or high temperatures create: Carbon oxides. Unidentified organic compounds.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing should be worn when fighting chemical fires.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Avoid contact with skin and eyes. Wear necessary protective equipment. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Sweep or scoop up and remove. Collect and dispose of spillage as indicated in section 13 of the SDS. Inform authorities if large amounts are involved.
Environmental precautions	Avoid discharge into water courses or onto the ground.

7. Handling and storage

Precautions for safe handling	Avoid contact with skin and eyes. Persons susceptible for allergic reactions should not handle this product. Use with adequate ventilation. Wear necessary protective equipment. Use personal protection as recommended in Section 8 of the SDS. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Store in closed original container in a dry place. Keep away from heat, sparks and open flame. Store away from incompatible materials.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Components	Type	Value
Pigment black 1 (CAS 75578-75-5)	TWA	0.005 mg/m3

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Carbon black (CAS 1333-86-4)	PEL	3.5 mg/m3	

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
White mineral oil (petroleum) (CAS 8042-47-5)	PEL	5 mg/m ³	Mist.

US. OSHA Table Z-2 (29 CFR 1910.1000)

Components	Type	Value
Pigment black 1 (CAS 75578-75-5)	Ceiling	0.1 mg/m ³

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Carbon black (CAS 1333-86-4)	TWA	3 mg/m ³	Inhalable fraction.

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Carbon black (CAS 1333-86-4)	TWA	0.1 mg/m ³	
White mineral oil (petroleum) (CAS 8042-47-5)	STEL	10 mg/m ³	Mist.
	TWA	5 mg/m ³	Mist.

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
Pigment black 1 (CAS 75578-75-5)	25 µg/l	Total chromium	Urine	*
	10 µg/l	Total chromium	Urine	*

* - For sampling details, please see the source document.

Appropriate engineering controls Provide adequate ventilation.

Individual protection measures, such as personal protective equipment

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

Skin protection

Hand protection

If significant skin exposure is anticipated, appropriate gloves should be worn to prevent skin contact with this substance. Suitable gloves can be recommended by the glove supplier.

Other

No protection is ordinarily required under normal conditions of use.

Respiratory protection

No protection is ordinarily required under normal conditions of use and with adequate ventilation.

Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

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.

9. Physical and chemical properties

Appearance

Physical state Solid.

Form Solid.

Color Black.

Odor Not available.

Odor threshold Not available.

pH Not applicable

Melting point/freezing point Not applicable

Initial boiling point and boiling range Not applicable

Flash point Not applicable

Evaporation rate	Not applicable
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Vapor pressure	Not applicable
Vapor density	Not applicable
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Insoluble
Partition coefficient (n-octanol/water)	Not applicable
Auto-ignition temperature	Not applicable
Decomposition temperature	Not applicable
Viscosity	Not applicable

10. Stability and reactivity

Reactivity	The product is non-reactive under normal conditions of use, storage and transport.
Chemical stability	Stable under normal temperature conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Heat, sparks, flames.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Carbon oxides. Unidentified organic compounds.

11. Toxicological information

Information on likely routes of exposure

Ingestion	No harmful effects expected in amounts likely to be ingested by accident.
Inhalation	Not likely, due to the form of the product.
Skin contact	Causes skin irritation. May cause an allergic skin reaction.
Eye contact	Not relevant, due to the form of the product.

Symptoms related to the physical, chemical and toxicological characteristics May cause allergic skin disorders in sensitive individuals.

Information on toxicological effects

Acute toxicity Persons with certain pre-existing upper respiratory disorders, such as bronchitis or asthma have an increased risk of irritation.

Components	Species	Test Results
Oleic Acid (CAS 112-80-1)		
Acute		
<i>Dermal</i>		
LD50	Guinea pig	> 3000 mg/kg
<i>Oral</i>		
LD50	Rat	74 g/kg
Skin corrosion/irritation	Causes skin irritation.	
Serious eye damage/eye irritation	Not relevant, due to the form of the product.	
Respiratory or skin sensitization		
Respiratory sensitization	No data available.	
Skin sensitization	May cause an allergic skin reaction.	
Germ cell mutagenicity	Contains a small amount of substance which may be mutagenic for mammalian somatic cells.	

Carcinogenicity Pure carbon black, a minor component of this product, is not classified as hazardous when bound in toner polymers. Pigment black 1, CAS # 75578-75-5 is not a carcinogen in this product. Hexavalent chromium (CrVI) is reduced to trivalent chromium (CrIII) during the manufacturing process of this colourant.

IARC Monographs. Overall Evaluation of Carcinogenicity

Carbon black (CAS 1333-86-4) 2B Possibly carcinogenic to humans.

NTP Report on Carcinogens

Pigment black 1 (CAS 75578-75-5) Known To Be Human Carcinogen.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Pigment black 1 (CAS 75578-75-5) Cancer

Reproductive toxicity No data available.

Specific target organ toxicity - single exposure No data available.

Specific target organ toxicity - repeated exposure No data available.

Aspiration hazard No data available.

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

Further information Expected to be a low hazard for usual industrial or commercial handling by trained personnel.

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence and degradability No data available.

Bioaccumulative potential No data available.

Mobility in soil No data available.

Mobility in general The product is insoluble in water.

Other adverse effects No data available.

13. Disposal considerations

Disposal instructions Do not discharge into drains or the environment, please contact your local municipality / waste handler for disposal requirements.

Hazardous waste code Not regulated.

Waste from residues / unused products Dispose in accordance with all applicable regulations.

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied.

14. Transport information

DOT
Not regulated as dangerous goods.

IATA
Not regulated as dangerous goods.

IMDG
Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

15. Regulatory information

US federal regulations This product is hazardous according to OSHA 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Dispersing agent (CAS 164383-18-0) 1.0 % One-Time Export Notification only.
Pigment black 1 (CAS 75578-75-5) 0.1 % Annual Export Notification required.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Pigment black 1 (CAS 75578-75-5) Cancer
Eye irritation
Skin sensitization

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes
Delayed Hazard - Yes
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Pigment black 1 (CAS 75578-75-5)

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

US state regulations WARNING: This product contains chemical(s) known to the State of California to cause cancer.

US. Massachusetts RTK - Substance List

Carbon black (CAS 1333-86-4)
White mineral oil (petroleum) (CAS 8042-47-5)

US. New Jersey Worker and Community Right-to-Know Act

Carbon black (CAS 1333-86-4)
Pigment black 1 (CAS 75578-75-5)
White mineral oil (petroleum) (CAS 8042-47-5)

US. Pennsylvania Worker and Community Right-to-Know Law

Carbon black (CAS 1333-86-4)
Oleic Acid (CAS 112-80-1)
Pigment black 1 (CAS 75578-75-5)
White mineral oil (petroleum) (CAS 8042-47-5)

US. Rhode Island RTK

Pigment black 1 (CAS 75578-75-5)

US. California Proposition 65

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Carbon black (CAS 1333-86-4)
Pigment black 1 (CAS 75578-75-5)

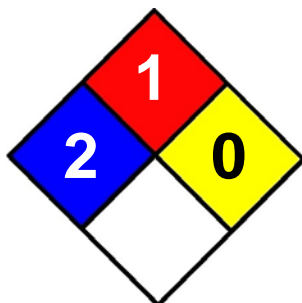
16. Other information, including date of preparation or last revision

Issue date 01-April-2014

Revision date -

Version # 01

NFPA Ratings



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