

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name or designation of the mixture Print Cartridge Black M C250 (Black toner)
 Registration number -
 Synonyms None.
 SDS No. 408352
 Issue date 20-August-2019
 Version number 01

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses Image formation in printing machines or copiers dry toner
 Uses advised against None known.

1.3. Details of the supplier of the safety data sheet

Importer Ricoh Europe SCM B.V.
 Address Blankenweg 24, 4612 RC Bergen op Zoom, The Netherlands
 E-mail reu.compliance@ricoh-europe.com

Manufacturer Ricoh Co., Ltd.
 Address Chome 3-6 Nakamagome, Ôta, Tokyo, 143-8555, Japan
 E-mail msdsinfo@nts.ricoh.co.jp

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 as amended

Hazard summary Not available.

2.2. Label elements

Label according to Regulation (EC) No. 1272/2008 as amended

Contains: Organic Salt, Polyester Resin 1, Polyester Resin 2, Silica, Wax
 Hazard pictograms None.
 Signal word None.
 Hazard statements The mixture does not meet the criteria for classification.

Precautionary statements

Prevention Not available.
 Response Not available.
 Storage Not available.
 Disposal Not available.

Supplemental label information None.

2.3. Other hazards None known.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Polyester Resin 1	40 - 60	Confidential	Confidential	-	
Classification:	-	-	-	-	
Polyester Resin 2	20 - 40	Confidential	Confidential	-	
Classification:	-	-	-	-	

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Carbon Black	1 - 10	1333-86-4 215-609-9	01-2119384822-32-xxxx	-	
Classification:	-				
Organic Salt	1 - 5	Confidential	Confidential	-	
Classification:	-				
Silica	1 - 5	Confidential	Confidential	-	
Classification:	-				
Wax	1 - 5	Confidential	Confidential	-	
Classification:	-				

Composition comments This product does not contain any of the following RoHS2 substances as ingredients. Cadmium, Hexavalent Chromium, Mercury, Lead, Polybrominated biphenyls (PBB), Polybrominated diphenylethers (PBDE), Phthalate esters (DEHP, BBP, DBP, and DIBP), SVHC (substances of very high concern: published by ECHA).

SECTION 4: First aid measures

General information Not available.

4.1. Description of first aid measures

Inhalation Move to fresh air. Get medical attention, if needed.
Skin contact Wash off with soap and plenty of water.
Eye contact Rinse with plenty of water. If eye irritation persists: Get medical advice/attention.
Ingestion Rinse mouth thoroughly. Get medical advice/attention if you feel unwell.

4.2. Most important symptoms and effects, both acute and delayed Not available.

4.3. Indication of any immediate medical attention and special treatment needed Treat symptomatically.

SECTION 5: Firefighting measures

General fire hazards Not available.

5.1. Extinguishing media

Suitable extinguishing media Water. Foam. Dry chemicals. Carbon dioxide (CO₂).
Unsuitable extinguishing media Not available.

5.2. Special hazards arising from the substance or mixture Explosion hazard: Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

5.3. Advice for firefighters

Special protective equipment for firefighters Wear suitable protective equipment.
Special fire fighting procedures Not available.

Specific methods Use standard firefighting procedures and consider the hazards of other involved materials.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel Avoid inhalation of dust.
For emergency responders Not available.

6.2. Environmental precautions Do not discharge into drains, water courses or onto the ground. Avoid release to the environment.

6.3. Methods and material for containment and cleaning up Remove from the surface by skimming or with suitable absorbents. Collect dust using a vacuum cleaner equipped with HEPA filter.

6.4. Reference to other sections Not available.

SECTION 7: Handling and storage

7.1. Precautions for safe handling	No special precautions are necessary beyond normal good hygiene practices. See Section 8 for additional personal protection advice when handling this product.
7.2. Conditions for safe storage, including any incompatibilities	Not available.
7.3. Specific end use(s)	Not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

Belgium. Exposure Limit Values

Components	Type	Value
Carbon Black (CAS 1333-86-4)	TWA	3 mg/m ³

Bulgaria. OELs. Regulation No 13 on protection of workers against risks of exposure to chemical agents at work

Components	Type	Value	Form
Carbon Black (CAS 1333-86-4)	TWA	3,5 mg/m ³	Inhalable fraction.

Croatia. Dangerous Substance Exposure Limit Values in the Workplace (ELVs), Annexes 1 and 2, Narodne Novine, 13/09

Components	Type	Value
Carbon Black (CAS 1333-86-4)	MAC	3,5 mg/m ³
	STEL	7 mg/m ³

Cyprus. OELs. Control of factory atmosphere and dangerous substances in factories regulation, PI 311/73, as amended.

Components	Type	Value
Carbon Black (CAS 1333-86-4)	TWA	3,5 mg/m ³

Czech Republic. OELs. Government Decree 361

Components	Type	Value	Form
Carbon Black (CAS 1333-86-4)	TWA	2 mg/m ³	Dust.

Denmark. Exposure Limit Values

Components	Type	Value
Carbon Black (CAS 1333-86-4)	TLV	3,5 mg/m ³

Finland. Workplace Exposure Limits

Components	Type	Value
Carbon Black (CAS 1333-86-4)	STEL	7 mg/m ³
	TWA	3,5 mg/m ³

France. Threshold Limit Values (VLEP) for Occupational Exposure to Chemicals in France, INRS ED 984

Components	Type	Value
Carbon Black (CAS 1333-86-4)	VME	3,5 mg/m ³

Regulatory status: Indicative limit (VL)

Greece. OELs (Decree No. 90/1999, as amended)

Components	Type	Value
Carbon Black (CAS 1333-86-4)	STEL	7 mg/m ³
	TWA	3,5 mg/m ³

Iceland. OELs. Regulation 154/1999 on occupational exposure limits

Components	Type	Value
Carbon Black (CAS 1333-86-4)	TWA	3,5 mg/m ³

Ireland. Occupational Exposure Limits

Components	Type	Value	Form
Carbon Black (CAS 1333-86-4)	TWA	3 mg/m3	Inhalable fraction.

Italy. Occupational Exposure Limits Components

Components	Type	Value	Form
Carbon Black (CAS 1333-86-4)	TWA	3 mg/m3	Inhalable fraction.

Latvia. OELs. Occupational exposure limit values of chemical substances in work environment Components

Components	Type	Value	Form
Carbon Black (CAS 1333-86-4)	TWA	4 mg/m3	Dust.

Norway. Administrative Norms for Contaminants in the Workplace Components

Components	Type	Value
Carbon Black (CAS 1333-86-4)	TLV	3,5 mg/m3

Ordinance of the Minister of Labour and Social Policy on 6 June 2014 on the maximum permissible concentrations and intensities of harmful health factors in the work environment, Journal of Laws 2014, item 817

Components	Type	Value	Form
Carbon Black (CAS 1333-86-4)	TWA	4 mg/m3	Inhalable fraction.

Portugal. VLEs. Norm on occupational exposure to chemical agents (NP 1796)

Components	Type	Value	Form
Carbon Black (CAS 1333-86-4)	TWA	3 mg/m3	Fume.

Slovakia. OELs. Regulation No. 300/2007 concerning protection of health in work with chemical agents Components

Components	Type	Value
Carbon Black (CAS 1333-86-4)	TWA	2 mg/m3

Spain. Occupational Exposure Limits Components

Components	Type	Value
Carbon Black (CAS 1333-86-4)	TWA	3,5 mg/m3

UK. EH40 Workplace Exposure Limits (WELs)

Components	Type	Value
Carbon Black (CAS 1333-86-4)	STEL	7 mg/m3
	TWA	3,5 mg/m3

Biological limit values No biological exposure limits noted for the ingredient(s).

Recommended monitoring procedures Not available.

Derived no effect levels (DNELs) Not available.

Predicted no effect concentrations (PNECs) Not available.

8.2. Exposure controls

Appropriate engineering controls Not available.

Individual protection measures, such as personal protective equipment

General information No special protective equipment required.

Eye/face protection Not normally needed.

Skin protection

- **Hand protection** Not normally needed.

- **Other** Not normally needed.

Respiratory protection No personal respiratory protective equipment normally required.

Thermal hazards Not available.

Hygiene measures	Not available.
Environmental exposure controls	Not available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state	Solid.
Form	Not available.
Colour	Not available.
Odour	Not available.
Odour threshold	Not available
pH	Not applicable
Melting point/freezing point	(Softening point) Approx,110
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.
Vapour pressure	Not applicable
Vapour density	Not applicable
Relative density	Approx,1,2
Solubility(ies)	
Solubility (water)	Insoluble
Partition coefficient (n-octanol/water)	Not available
Auto-ignition temperature	Not available.
Decomposition temperature	Not available
Viscosity	Not applicable
Explosive properties	Not available.
Oxidising properties	Not available.
9.2. Other information	Dust explosion (like most finely grained organic powders)
Density	Approx,1,2
Flammability	Not flammable
Specific gravity	1,8 estimated
VOC	<= 0,2

SECTION 10: Stability and reactivity

10.1. Reactivity	The product is stable and non reactive under normal conditions of use, storage and transport.
10.2. Chemical stability	Material is stable under normal conditions.
10.3. Possibility of hazardous reactions	Dust explosive, but under the intended conditions of use, the probability of dust explosion is very low.
10.4. Conditions to avoid	None under normal conditions.
10.5. Incompatible materials	Not available.
10.6. Hazardous decomposition products	At thermal decomposition temperatures, carbon monoxide and carbon dioxide.

SECTION 11: Toxicological information

General information	Not available.
Information on likely routes of exposure	
Inhalation	Not available.
Skin contact	Not available.

Eye contact	Not available.
Ingestion	Not available.
Symptoms	Not available.

11.1. Information on toxicological effects

Acute toxicity

Product	Species	Test Results
Print Cartridge Black M C250H (Black toner)		
Acute		
Oral		
LD50	Rat	>= 5000 mg/kg

Skin corrosion/irritation

Irritation Corrosion - Skin: P.I.I. value

Print Cartridge Black M C250H (Black toner)	<= 1
	Species: Rabbit
	Notes: Based on other product test results of similar ingredients.

Serious eye damage/eye irritation Not available.

Respiratory sensitisation Not available.

Skin sensitisation

Skin sensitisation

Print Cartridge Black M C250H (Black toner)	0 %
	Species: Marmott
	Notes: Based on other product test results of similar ingredients.

Germ cell mutagenicity

Germ cell mutagenicity: Ames test

Print Cartridge Black M C250H (Black toner)	Result: Negative
	Notes: Ames test

Carcinogenicity In 1996, the IARC re-evaluated carbon black as a Group 2B carcinogen for which there is inadequate human evidence, but sufficient animal evidence. However, there is a two-year inhalation study for a toner containing carbon black, which demonstrated no association between toner exposure and tumour development in rats even if the amount of carbon black powder is changed.

Reproductive toxicity Not available.

Specific target organ toxicity - single exposure Not available.

Specific target organ toxicity - repeated exposure Not available.

Aspiration hazard Not available.

Mixture versus substance information Not available.

Other information Not available.

SECTION 12: Ecological information

12.1. Toxicity This material is not expected to be harmful to aquatic life.

12.2. Persistence and degradability Not available.

12.3. Bioaccumulative potential Not available.

Partition coefficient n-octanol/water (log Kow) Not available.

Bioconcentration factor (BCF) Not available.

12.4. Mobility in soil Not available.

12.5. Results of PBT and vPvB assessment Not a PBT or vPvB substance or mixture.

12.6. Other adverse effects Not available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Residual waste Not available.

Contaminated packaging	Not available.
EU waste code	Not available.
Disposal methods/information	Contract with a disposal operator licensed by the Law on Disposal and Cleaning.
Special precautions	Dispose in accordance with all applicable regulations. Do not throw in contents or fire containing contents. The contents will splash and cause burns.

SECTION 14: Transport information

ADR

14.1. - 14.6.: Not regulated as dangerous goods.

RID

14.1. - 14.6.: Not regulated as dangerous goods.

ADN

14.1. - 14.6.: Not regulated as dangerous goods.

IATA

14.1. - 14.6.: Not regulated as dangerous goods.

IMDG

14.1. - 14.6.: Not regulated as dangerous goods.

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

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulations

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended
Not listed.

Regulation (EC) No. 850/2004 On persistent organic pollutants, Annex I as amended
Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended
Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended
Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended
Not listed.

Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended
Not listed.

Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended
Not listed.

Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA
Not listed.

Authorisations

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended
Not listed.

Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended
Not listed.

Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended.
Not listed.

Other EU regulations

Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended
Not listed.

National regulations Not available.

15.2. Chemical safety assessment Not available.

SECTION 16: Other information

List of abbreviations Not available.

References

ACGIH Documentation of the Threshold Limit Values and Biological Exposure Indices
HSDB® - Hazardous Substances Data Bank
National Toxicology Program (NTP) Report on Carcinogens
US. IARC Monographs on Occupational Exposures to Chemical Agents
JIS Z 7253:2012 Hazard communication of chemicals based on GHS – Labelling and Safety Data Sheet (SDS)
Japan Society for Occupational Health, Recommendation of Occupational Exposure Limits
JIS Z 7252:2014 Classification of chemicals based on “Globally Harmonized System of Classification and Labelling of Chemicals (GHS)”

Information on evaluation method leading to the classification of mixture

Not available.

Full text of any H-statements not written out in full under Sections 2 to 15

None.

Revision information

None.

Training information

Not available.

Disclaimer

The information in the sheet was written based on the best knowledge and experience currently available.