RICOH

SAFETY DATA SHEET

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

1.1. Product identifier

Trade name or designation of the mixture	RICOH / Nashuatec / Rex-Rotary / Gestetner Toner MP 2014 (Black toner)
Registration number	-
Synonyms	None.
SDS No.	842128
Issue date	12-08-2005
Version number	03
Revision date	01-06-2019
Supersedes date	12-08-2005

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

Distributor	Ricoh UK Ltd
Address	800 Pavilion Drive, Northampton Business Park Northampton NN4 7YL, UK
Phone	+44 330 123 3011
E-mail	contactcr@ricoh.co.uk
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
1.4.Emergency telephone number	111 (UK only)

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:	Polyester resin, 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	>80	Confidential -	Confidential	-	
Classification: -					
Carbon Black	<15	1333-86-4 215-609-9	01-2119384822-32-xxxx	-	
Classification: -					
Wax	<10	8015-86-9 232-399-4	Excempt	-	
Classification: -					
Titanium dioxide	0.1 - 1	13463-67-7 236-675-5	01-2119489379-17-xxxx	-	
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 diphenyleters (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

UK. EH40 Workplace Exposure Limits (WELs)

Components	Type	Value	Form
Carbon Black (CAS 1333-86-4)	STEL	7 mg/m3	
	TWA	3.5 mg/m3	
Titanium dioxide (CAS 13463-67-7)	TWA	4 mg/m3	Respirable.
		10 mg/m3	Inhalable

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 Powder.

Colour Black.

Odour Sligthly plastic odour

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	1.95 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
RICOH / Nashuatec / Rex-Rotary / Gestetner Toner MP 2014 (Black toner)		
Acute		
Oral		
LD50	Rat	>= 5000 mg/kg

Skin corrosion/irritation

Irritation Corrosion - Skin: P.I.I. value		
RICOH / Nashuatec / Rex-Rotary / Gestetner Toner MP 2014 (Black toner)		Result: Non-irritant Species: Rabbit

Serious eye damage/eye irritation Not available.

Respiratory sensitisation Not available.

Skin sensitisation

Skin sensitisation

RICOH / Nashuatec / Rex-Rotary / Gestetner Toner MP 2014 (Black toner)	Result: Non-skinsensitive Species: Marmott

Germ cell mutagenicity

Germ cell mutagenicity: Ames test

RICOH / Nashuatec / Rex-Rotary / Gestetner Toner MP 2014 (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. Titanium dioxide contained in this product is classified to Group 2B of IARC as the result of inhalation test in use of rat.
But oral/skin test does not show carcinogenicity.
In the animal experiment with very high concentration of titanium dioxide (excessive burden of rat's lungs clearance mechanism (overload phenomenon)), the rat alone showed lung tumor. Under a normal use practice, the concentration should be far lower than the above; and it is assumed that there is no such use.
Also, relation between respiratory disease and work exposure of titanium dioxide is not observed with epidemiological survey. Carbon black and titanium dioxide contained in this product are classified to Group 2B of IARC as the result of inhalation test in use of rat.
But oral/skin test does not show carcinogenicity.
The toner containing carbon black did not show carcinogenicity in chronic inhalation exposure test in use of rat.
In the animal experiment with very high concentration of titanium dioxide (excessive burden of rat's lungs clearance mechanism (overload phenomenon)), the rat alone showed lung tumor. Under a normal use practice, the concentration should be far lower than the above; and it is assumed that there is no such use.
Also, relation between respiratory disease and work exposure of titanium dioxide is not observed with epidemiological survey.

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

Titanium dioxide (CAS 13463-67-7)

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.