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

Print Cartridge Cyan M C240

Registration number

Superior Non

 Synonyms
 None.

 SDS No.
 408452

 Issue date
 04-11-2021

Version number 0

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

Hazard pictograms None.

Signal word None.

Hazard statements The mixture does not meet the criteria for classification.

Precautionary statements

PreventionNot available.ResponseNot available.StorageNot available.DisposalNot 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
Paraffin Waxes And Hydrocarbon	>=10-25<	8002-74-2	-	-	
Waxes	=	232-315-6			
Classification	: -				
COPPER FLAKES (COATED WITH ALIPHATIC ACID)	<=5	7440-50-8 231-159-6	-	029-019-01-X	
,	Eye Irrit. 2;	4;H302;(ATE: 500 n	ng/kg), Acute Tox. 3;H331;(A 1;H400(M=10), Aquatic	TE: 0,5 mg/l),	

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.

Rinse mouth thoroughly. Get medical advice/attention if you feel unwell. Ingestion

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

Water. Foam. Dry chemicals. Carbon dioxide (CO2).

media

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

Not available.

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 of the SDS 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

Material name: Print Cartridge Cyan M C240 - 408452

Occupational exposure limits

Austria. MAK List, OEL Ordinance (G Components	Туре	Value	Form
COPPER FLAKES COATED WITH ALIPHATIC ACID) (CAS 7440-50-8)	MAK	1 mg/m3	Inhalable fraction.
		0,1 mg/m3	Fume and respirable dust.
	STEL	4 mg/m3	Inhalable fraction.
		0,4 mg/m3	Fume and respirable dust.
Belgium. Exposure Limit Values Components	Туре	Value	Form
COPPER FLAKES COATED WITH ALIPHATIC ACID) (CAS 7440-50-8)	TWA	1 mg/m3	Dust and mist.
		0,2 mg/m3	Fume.
Paraffin Waxes And Hydrocarbon Waxes (CAS 3002-74-2)	TWA	2 mg/m3	Fume.
Bulgaria. OELs. Regulation No 13 on Components	protection of workers agai	nst risks of exposure to chen Value	nical agents at work
COPPER FLAKES COATED WITH ALIPHATIC ACID) (CAS 7440-50-8)	TWA	0,1 mg/m3	
Croatia. Dangerous Substance Expos	sure Limit Values in the Wo	orkplace (ELVs), Annexes 1 ar	nd 2, Narodne Novine, 13/0
Components	Туре	Value	Form
COPPER FLAKES COATED WITH ALIPHATIC ACID) (CAS	Type MAC	Value 1 mg/m3	Form
COPPER FLAKES COATED WITH ALIPHATIC ACID) (CAS			Form Dust and fume.
COPPER FLAKES COATED WITH ALIPHATIC ACID) (CAS		1 mg/m3	
COPPER FLAKES COATED WITH ALIPHATIC ACID) (CAS	MAC	1 mg/m3 0,2 mg/m3	
COPPER FLAKES (COATED WITH ALIPHATIC ACID) (CAS 7440-50-8) Paraffin Waxes And Hydrocarbon Waxes (CAS	MAC	1 mg/m3 0,2 mg/m3 2 mg/m3	Dust and fume.
COPPER FLAKES (COATED WITH ALIPHATIC ACID) (CAS 7440-50-8) Paraffin Waxes And Hydrocarbon Waxes (CAS	MAC	1 mg/m3 0,2 mg/m3 2 mg/m3 2 mg/m3	Dust and fume. Dust and fume.
COPPER FLAKES COATED WITH ALIPHATIC ACID) (CAS 7440-50-8) Paraffin Waxes And Hydrocarbon Waxes (CAS 3002-74-2) Cyprus. OELs. Control of factory atm	MAC STEL MAC STEL	1 mg/m3 0,2 mg/m3 2 mg/m3 2 mg/m3 6 mg/m3	Dust and fume. Dust and fume. Fume. Fume.
COPPER FLAKES (COATED WITH ALIPHATIC ACID) (CAS 7440-50-8) Paraffin Waxes And Hydrocarbon Waxes (CAS 8002-74-2) Cyprus. OELs. Control of factory atm Components COPPER FLAKES (COATED WITH ALIPHATIC ACID) (CAS 7440-50-8)	MAC STEL MAC STEL sosphere and dangerous su	1 mg/m3 0,2 mg/m3 2 mg/m3 2 mg/m3 2 mg/m3 6 mg/m3	Dust and fume. Dust and fume. Fume. Fume. ion, PI 311/73, as amended
COPPER FLAKES COATED WITH ALIPHATIC ACID) (CAS '440-50-8) Paraffin Waxes And Hydrocarbon Waxes (CAS 3002-74-2) Cyprus. OELs. Control of factory atm Components COPPER FLAKES COATED WITH ALIPHATIC ACID) (CAS '440-50-8) Czech Republic. OELs. Government I	MAC STEL STEL STEL sosphere and dangerous su Type TWA	1 mg/m3 0,2 mg/m3 2 mg/m3 2 mg/m3 6 mg/m3 ubstances in factories regulat	Dust and fume. Dust and fume. Fume. Fume. ion, PI 311/73, as amended Form
COPPER FLAKES (COATED WITH ALIPHATIC ACID) (CAS 7440-50-8) Paraffin Waxes And Hydrocarbon Waxes (CAS 8002-74-2) Cyprus. OELs. Control of factory atm Components COPPER FLAKES (COATED WITH ALIPHATIC ACID) (CAS 7440-50-8) Czech Republic. OELs. Government I Components COPPER FLAKES (COATED WITH ALIPHATIC ACID) (CAS	MAC STEL MAC STEL cosphere and dangerous su Type TWA Decree 361	1 mg/m3 0,2 mg/m3 2 mg/m3 2 mg/m3 2 mg/m3 6 mg/m3 ubstances in factories regulat Value 0,2 mg/m3	Dust and fume. Dust and fume. Fume. Fume. ion, PI 311/73, as amended Form Fume.
COPPER FLAKES (COATED WITH (ALIPHATIC ACID) (CAS (7440-50-8) Paraffin Waxes And Hydrocarbon Waxes (CAS (3002-74-2) Cyprus. OELs. Control of factory atm Components COPPER FLAKES (COATED WITH (ALIPHATIC ACID) (CAS (7440-50-8) Czech Republic. OELs. Government II Components COPPER FLAKES (COATED WITH (ALIPHATIC ACID) (CAS	MAC STEL MAC STEL cosphere and dangerous su Type TWA Decree 361 Type	1 mg/m3 0,2 mg/m3 2 mg/m3 2 mg/m3 6 mg/m3 ubstances in factories regulat Value 0,2 mg/m3	Dust and fume. Dust and fume. Fume. Fume. ion, PI 311/73, as amended Form Fume.
COPPER FLAKES (COATED WITH ALIPHATIC ACID) (CAS (7440-50-8) Paraffin Waxes And Hydrocarbon Waxes (CAS (B002-74-2) Cyprus. OELs. Control of factory atm Components COPPER FLAKES (COATED WITH ALIPHATIC ACID) (CAS	MAC STEL MAC STEL cosphere and dangerous su Type TWA Decree 361 Type	1 mg/m3 0,2 mg/m3 2 mg/m3 2 mg/m3 2 mg/m3 6 mg/m3 ubstances in factories regulat Value 0,2 mg/m3 Value 2 mg/m3	Dust and fume. Dust and fume. Fume. Fume. ion, PI 311/73, as amended Form Fume. Form Aerosol, inhalable.

Components	Туре	Value	Form
COPPER FLAKES COATED WITH LIPHATIC ACID) (CAS 440-50-8)	TLV	1 mg/m3	Dust.
		0,1 mg/m3	Fume.
Paraffin Waxes And Hydrocarbon Waxes (CAS 002-74-2)	TLV	2 mg/m3	Fume.
stonia. OELs. Occupation	onal Exposure Limits of Hazardous Sul Type	bstances (Regulation No. 105/ Value	2001, Annex), as amende Form
COPPER FLAKES COATED WITH LIPHATIC ACID) (CAS 440-50-8)	TWA	1 mg/m3	Total dust.
,		0,2 mg/m3	Fine dust.
Paraffin Waxes And Hydrocarbon Waxes (CAS 002-74-2)	TWA	2 mg/m3	Vapor.
inland. Workplace Expo	sure Limits Type	Value	Form
COPPER FLAKES (COATED WITH ALIPHATIC ACID) (CAS 7440-50-8)	TWA	0,1 mg/m3	Respirable dust and/or fume.
		0,02 mg/m3	Respirable.
araffin Waxes And lydrocarbon Waxes (CAS 002-74-2)	TWA	1 mg/m3	Fume.
rance. Threshold Limit \	Values (VLEP) for Occupational Exposi Type	ure to Chemicals in France, IN Value	RS ED 984 Form
COPPER FLAKES COATED WITH	VLE	2 mg/m3	Dust.
	Indicative limit (VL)		
440-50-8) Regulatory status:	VME	1 mg/m3	Dust.
440-50-8)		1 mg/m3 0,2 mg/m3	Dust. Fume.
440-50-8) Regulatory status:	VME	-	
Regulatory status: Regulatory status: Regulatory status: Raraffin Waxes And lydrocarbon Waxes (CAS)	VME Indicative limit (VL)	-	
Regulatory status: Regulatory status: Regulatory status: Raraffin Waxes And lydrocarbon Waxes (CAS)	VME Indicative limit (VL) Indicative limit (VL)	0,2 mg/m3	Fume.
Regulatory status: Regulatory status: Regulatory status: Regulatory status: Paraffin Waxes And Hydrocarbon Waxes (CAS 002-74-2) Regulatory status: Regulatory status:	VME Indicative limit (VL) Indicative limit (VL) VME	0,2 mg/m3 2 mg/m3	Fume. Fume.
Regulatory status: Regulatory status: Regulatory status: Regulatory status: Paraffin Waxes And Hydrocarbon Waxes (CAS 002-74-2) Regulatory status: Regulatory status: Regulatory status: Regulatory status: Regulatory Status:	VME Indicative limit (VL) Indicative limit (VL) VME Indicative limit (VL)	0,2 mg/m3 2 mg/m3	Fume. Fume.
Regulatory status: Regulatory status: Regulatory status: Regulatory status: Paraffin Waxes And Paydrocarbon Waxes (CAS 002-74-2) Regulatory status: Regulatory status: Remany. DFG MAK List on the Work Area (DFG) Components COPPER FLAKES COATED WITH ALIPHATIC ACID) (CAS	VME Indicative limit (VL) Indicative limit (VL) VME Indicative limit (VL) (advisory OELs). Commission for the I	0,2 mg/m3 2 mg/m3 nvestigation of Health Hazard	Fume. Fume. s of Chemical Compound
Regulatory status: Regulatory status: Regulatory status: Regulatory status: Raraffin Waxes And lydrocarbon Waxes (CAS 002-74-2) Regulatory status: Regulatory status: Remany. DFG MAK List of the Work Area (DFG) Components COPPER FLAKES COATED WITH LIPHATIC ACID) (CAS 440-50-8) Regulatory status:	Indicative limit (VL) Indicative limit (VL) VME Indicative limit (VL) (advisory OELs). Commission for the I Type TWA D. 90/1999, as amended)	0,2 mg/m3 2 mg/m3 nvestigation of Health Hazard Value 0,01 mg/m3	Fume. Fume. s of Chemical Compound Form Respirable fraction.
Regulatory status: Regulatory status: Regulatory status: Regulatory status: Paraffin Waxes And Hydrocarbon Waxes (CAS 002-74-2) Regulatory status: Regulatory st	VME Indicative limit (VL) Indicative limit (VL) VME Indicative limit (VL) (advisory OELs). Commission for the I Type TWA	0,2 mg/m3 2 mg/m3 nvestigation of Health Hazard Value	Fume. Fume. s of Chemical Compound
Regulatory status: Regulatory status: Paraffin Waxes And Hydrocarbon Waxes (CAS) 1002-74-2) Regulatory status:	VME Indicative limit (VL) Indicative limit (VL) VME Indicative limit (VL) (advisory OELs). Commission for the I Type TWA D. 90/1999, as amended) Type	0,2 mg/m3 2 mg/m3 nvestigation of Health Hazard Value 0,01 mg/m3 Value	Fume. Fume. s of Chemical Compound Form Respirable fraction. Form

Components	Туре	Value	Form
Paraffin Waxes And Hydrocarbon Waxes (CAS 8002-74-2)	STEL	6 mg/m3	Fume.
	TWA	2 mg/m3	Fume.
Hungary. OELs. Joint Decree on Chemi Components	cal Safety of Workplaces Type	Value	
COPPER FLAKES (COATED WITH ALIPHATIC ACID) (CAS 7440-50-8)	STEL	0,2 mg/m3	
,	TWA	0,1 mg/m3	
Iceland. OELs. Regulation 154/1999 on o	occupational exposure lin Type	nits Value	Form
COPPER FLAKES (COATED WITH ALIPHATIC ACID) (CAS 7440-50-8)	TWA	1 mg/m3	Total dust.
Paraffin Waxes And Hydrocarbon Waxes (CAS	TWA	0,1 mg/m3 2 mg/m3	Respirable dust. Fume.
8002-74-2) Ireland. Occupational Exposure Limits Components	Туре	Value	Form
COPPER FLAKES (COATED WITH ALIPHATIC ACID) (CAS 7440-50-8)	TWA	1 mg/m3	Dust and mist.
		0,2 mg/m3	Fume.
Paraffin Waxes And Hydrocarbon Waxes (CAS 8002-74-2)	STEL	6 mg/m3	Fume.
,	TWA	2 mg/m3	Fume.
Italy. Occupational Exposure Limits			_
Components	Туре	Value	Form
COPPER FLAKES (COATED WITH ALIPHATIC ACID) (CAS 7440-50-8)	TWA	1 mg/m3	Dust and mist.
		0,2 mg/m3	Fume.
Paraffin Waxes And Hydrocarbon Waxes (CAS 8002-74-2)	TWA	2 mg/m3	Fume.
Latvia. OELs. Occupational exposure li Components	mit values of chemical su Type	bstances in work environme Value	ent
COPPER FLAKES (COATED WITH ALIPHATIC ACID) (CAS 7440-50-8)	STEL	1 mg/m3	
	TWA	0,5 mg/m3	
Lithuania. OELs. Limit Values for Chen Components	nical Substances, General Type	Requirements Value	Form
	TWA	1 mg/m3	Inhalable fraction.
COPPER FLAKES (COATED WITH ALIPHATIC ACID) (CAS 7440-50-8)	TWA	i ilig/ilio	imalable fraction.

Netherlands. OELs (binding) Components	Туре	Value	Form
COPPER FLAKES (COATED WITH ALIPHATIC ACID) (CAS 7440-50-8)	TWA	0,1 mg/m3	Inhalable fraction.
Norway. Administrative Norms for Components	Contaminants in the Workpla Type	ace Value	Form
COPPER FLAKES (COATED WITH ALIPHATIC ACID) (CAS 7440-50-8)	TLV	1 mg/m3	Dust.
		0,1 mg/m3	Fume.
Paraffin Waxes And Hydrocarbon Waxes (CAS 8002-74-2)	TLV	2 mg/m3	Fume.
Poland. Ordinance of the Minister of concentrations and intensities of ha	rmful health factors in the	work environment, Journal of	Laws 2014, item 817
Components	Туре	Value	Form
COPPER FLAKES (COATED WITH ALIPHATIC ACID) (CAS 7440-50-8)	TWA	0,2 mg/m3	
Paraffin Waxes And Hydrocarbon Waxes (CAS 8002-74-2)	TWA	2 mg/m3	Inhalable fraction.
Portugal. VLEs. Norm on occupation Components	nal exposure to chemical ag Type	gents (NP 1796) Value	Form
COPPER FLAKES (COATED WITH ALIPHATIC ACID) (CAS 7440-50-8)	TWA	1 mg/m3	Dust and mist.
		0,2 mg/m3	Fume.
Paraffin Waxes And Hydrocarbon Waxes (CAS 8002-74-2)	TWA	2 mg/m3	Fume.
Romania. OELs. Protection of worke Components	ers from exposure to chemi Type	cal agents at the workplace Value	Form
COPPER FLAKES (COATED WITH ALIPHATIC ACID) (CAS 7440-50-8)	STEL	1,5 mg/m3 0,2 mg/m3	Dust.
	TWA	0,2 mg/m3	Dust.
Paraffin Waxes And Hydrocarbon Waxes (CAS 8002-74-2)	STEL	6 mg/m3	Fume.
	TWA	2 mg/m3	Fume.
Slovakia. OELs. Regulation No. 300/ Components	2007 concerning protection Type	of health in work with chemi Value	cal agents Form
COPPER FLAKES (COATED WITH ALIPHATIC ACID) (CAS 7440-50-8)	TWA	1 mg/m3	Inhalable fraction.
Denoffin Move - Arad	OTF!	0,2 mg/m3	Respirable fume.
Paraffin Waxes And Hydrocarbon Waxes (CAS 8002-74-2)	STEL	6 mg/m3	Fume.
	TWA	2 mg/m3	Fume.

Spain. Occupational Exposur Components	Туре	Value	Form
COPPER FLAKES (COATED WITH ALIPHATIC ACID) (CAS 7440-50-8)	TWA	0,1 mg/m3	Respirable fraction.
Paraffin Waxes And Hydrocarbon Waxes (CAS 8002-74-2)	TWA	2 mg/m3	Fume.
Sweden. OELs. Work Enviror Components	nment Authority (AV), Occupation Type	al Exposure Limit Values (AFS Value	2015:7) Form
COPPER FLAKES (COATED WITH ALIPHATIC ACID) (CAS 7440-50-8)	TWA	0,01 mg/m3	Respirable dust.
Switzerland. SUVA Grenzwer Components	te am Arbeitsplatz Type	Value	Form
COPPER FLAKES (COATED WITH ALIPHATIC ACID) (CAS 7440-50-8)	STEL	0,2 mg/m3	Inhalable fraction.
	TWA	0,1 mg/m3	Inhalable fraction.
Paraffin Waxes And Hydrocarbon Waxes (CAS 8002-74-2)	TWA	2 mg/m3	Respirable fume.
UK. EH40 Workplace Exposu Components	re Limits (WELs) Type	Value	Form
COPPER FLAKES (COATED WITH ALIPHATIC ACID) (CAS 7440-50-8)	STEL	2 mg/m3	Inhalable dusts and mist
	TWA	1 mg/m3	Inhalable dusts and mist
		0,2 mg/m3	Fume.
Paraffin Waxes And Hydrocarbon Waxes (CAS 8002-74-2)	STEL	6 mg/m3	Fume.
,	TWA	2 mg/m3	Fume.
ogical limit values	No biological exposure limits noted	for the ingredient(s).	
ommended monitoring cedures	Not available.	5 (,	
ived no effect levels ELs)	Not available.		
dicted no effect centrations (PNECs)	Not available.		
Exposure controls			
ropriate engineering trols	Not available.		
vidual protection measures, s General information	such as personal protective equip No special protective equipment re		
Eye/face protection	Not normally needed.If necessary,		
Skin protection			
- Hand protection	Wear suitable gloves.If necessary,		
- Other	Not normally needed.If necessary,	Wear suitable coveralls to prever	nt exposure to the skin.
	No personal respiratory protective equipment normally required.		

Not available. Thermal hazards

Wash hands after handling. Hygiene measures

Environmental exposure

controls

Not available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Solid. Physical state Solid. **Form** Color Cyan

Sligthly plastic odour Odor

Melting point/freezing point **Boiling point or initial boiling** Not available. Not available.

point and boiling range

Flammability (solid, gas) Not available. Upper/lower flammability or explosive limits Flammability limit - lower

Not available.

Flammability limit - upper

(%)

(%)

Not available.

Flash point Not available. **Auto-ignition temperature** Not available. **Decomposition temperature** Not available. Not available.

Solubility(ies)

Not available. Solubility (water) **Partition coefficient** Not available.

(n-octanol/water)

Vapor pressure Not available. Not available. Vapor density Not available. Relative density Not available. **Particle characteristics**

Other safety characteristics Dust explosion (like most finely grained organic powders)

SECTION 10: Stability and reactivity

10.1. Reactivity The product is stable and non reactive under normal conditions of use, storage and transport.

Material is stable under normal conditions. 10.2. Chemical stability

10.3. Possibility of hazardous

reactions

Dust explosive, but under the intended conditions of use, the probability of dust explosion is very

low.

None under normal conditions. 10.4. Conditions to avoid

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. Not available. Skin contact Not available. Eye contact Not available. Ingestion **Symptoms** Not available.

11.1. Information on toxicological effects

Acute toxicity

Product Test Results Species

Print Cartridge Cyan M C240

Acute Inhalation Dust and mist.

LC50 Rat > 5000 mg/l, 4 hours

Product Species Test Results

Oral

LD50 Rat > 5000 mg/kg

Skin corrosion/irritation Serious eye damage/eye

irritation

Not available. Not available.

Respiratory sensitization Not available. Skin sensitization Not available.

Germ cell mutagenicity

Germ cell mutagenicity: Ames test

Print Cartridge Cyan M C240 Result: Not mutagenic in Ames test.

Titanium dioxide contained in this product is classified to Group 2B of IARC as the result of Carcinogenicity

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.

Reproductive toxicity

Specific target organ toxicity -

single exposure

Not available. Not available.

Specific target organ toxicity -

repeated exposure

Not available.

Aspiration hazard Not available.

Mixture versus substance

information

Not available.

11.2. Information on other hazards

Endocrine disrupting

properties

Not available.

Not available. Other information

SECTION 12: Ecological information

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

Product Test Results Species

Print Cartridge Cyan M C240

Aquatic

Acute

Crustacea EC50 Daphnia > 1000 mg/l, 24 hours > 1000 mg/l, 48 hours

Fish LC50 Fish > 1000000 µg/l, 96 hours

12.2. Persistence and

degradability

Not available.

Not available. 12.3. Bioaccumulative potential Partition coefficient Not available

n-octanol/water (log Kow)

Not available.

Bioconcentration factor (BCF) Not available. 12.4. Mobility in soil

12.5. Results of PBT and vPvB

Not a PBT or vPvB substance or mixture.

assessment

12.6. Endocrine disrupting

properties

Not available.

12.7. Other adverse effects Not available.

12.8. Additional information

Estonia Dangerous substances in soil Data

COPPER FLAKES (COATED WITH ALIPHATIC ACID) Copper (Cu) 100 MG/KG

(CAS 7440-50-8)

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 precautionsDispose in accordance with all applicable regulations. Do not throw in contents or containers

containing contents into fire. The contents will splash and cause burns.

SECTION 14: Transport information

ADR

14.1. UN numberNot available. **14.2. UN proper shipping**Not available.

name

14.3. Transport hazard class(es)

Class Not available.

Subsidiary risk -

Hazard No. (ADR)

Tunnel restriction code

14.4. Packing group

Not available.

Not available.

14.5. Environmental hazards No.

14.6. Special precautions Not available.

for user

RID

14.1. UN number Not available. **14.2. UN proper shipping** Not available.

name

14.3. Transport hazard class(es)

Class Not available.

Subsidiary risk -

14.4. Packing group Not available.

14.5. Environmental hazards No.

14.6. Special precautions Not available.

for user

ADN

14.1. UN numberNot available. **14.2. UN proper shipping**Not available.

name

14.3. Transport hazard class(es)

Class Not available.

Subsidiary risk

14.4. Packing group Not available.

14.5. Environmental hazards No.

14.6. Special precautions Not available.

for user

IATA

14.1. UN numberNot available.14.2. UN proper shippingNot available.

name

14.3. Transport hazard class(es)

Class Not available.

Subsidiary risk

14.4. Packing group Not available.

14.5. Environmental hazards No.

14.6. Special precautions Not available.

for user

IMDG

14.1. UN number Not available.14.2. UN proper shipping Not available.

name

14.3. Transport hazard class(es)

Class Not available.

Subsidiary risk -

14.4. Packing group Not available.

14.5. Environmental hazards

Marine pollutant No.

EmS Not available.

14.6. Special precautions Not available.

for user

14.7. Maritime transport in bulk

Not available.

according to IMO instruments

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 (EU) 2019/1021 On persistent organic pollutants (recast), 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

COPPER FLAKES (COATED WITH ALIPHATIC ACID) (CAS 7440-50-8)

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

Authorizations

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

COPPER FLAKES (COATED WITH ALIPHATIC ACID) (CAS 7440-50-8)

National regulations Not available.

15.2. Chemical safety Not available.

assessment

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

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)"

JIS Z 7253:2012 Hazard communication of chemicals based on GHS – Labelling and Safety Data

Sheet (SDS)

National Toxicology Program (NTP) Report on Carcinogens

US. IARC Monographs on Occupational Exposures to Chemical Agents

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

H302 Harmful if swallowed.

H319 Causes serious eye irritation.

H331 Toxic if inhaled.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

Revision information None.

Training information Not available.

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

available.