

Issue date: 23/06/2016 Revision date: 30/10/2023

#### SAFETY DATA SHEET

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

Product identifier

Product name

: Cyan Toner for TASKalfa 4052ci, 4053ci

Consumable name

: TK-8529C

#### Relevant identified uses of the substance or mixture and uses advised against

Identified uses

: The image formation of our electrophotographic equipments.

Other uses are not recommended.

Details of the supplier of the safety data sheet

Manufacturer

: KYOCERA Document Solutions Inc.

Address

: 1-2-28 Tamatsukuri, Chuo-ku, Osaka 540-8585, Japan

Supplier

KYOCERA Document Solutions Australia Pty. Ltd.

Address

Level 3, 1 Epping Road, North Ryde, New South Wales 2113, Australia

Telephone number

+61-2-9888-9999

#### **Emergency telephone number**

: 131 126 (24 hours) Poison Information Centre.

### **SECTION 2: Hazards identification**

#### Classification of the substance or mixture

Classification according to GHS under the WHS Regulations

Not classified as hazardous mixture.

**GHS** label elements

Not applicable.

#### Other hazards

See section 4 and 11 for information on health effects and symptoms.

See section 9 for dust explosion information.

#### **SECTION 3: Composition/information on ingredients**

Substance or Mixture:

: Mixture

| Chemical name                         | Identifier   | Weight%           |
|---------------------------------------|--------------|-------------------|
|                                       | CAS No.      |                   |
| Polyester resin (3 kinds)             | Confidential | 70-80             |
| Ferrite (Ferrite including manganese) | 66402-68-4   | 5-10 (as Mn: < 2) |
| Organic pigment                       | Confidential | 3-8               |
| Amorphous silica                      | 7631-86-9    | 1-5               |
| Titanium dioxide                      | 13463-67-7   | 1-5               |
| Trainian dioxido                      | 10 100 07 7  |                   |
|                                       |              |                   |

#### Information of Ingredients

See section 8 for the information of occupational exposure limits.



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# **SECTION 4: First aid measures**

Description of first aid measures
Inhalation Re

Remove from exposure to fresh air and gargle with plenty of water.

Consult a doctor in case of such symptoms as coughing.

Skin Contact Wash with soap and water.

Eye Contact Flush with water immediately and see a doctor if irritating.

Ingestion Rinse out the mouth. Drink one or two glasses of water to dilute.

Seek medical treatment if necessary.

#### Most important symptoms and effects, both acute and delayed

Potential health effects and symptoms

Inhalation Prolonged inhalation of excessive dusts may cause lung damage.

Use of this product as intended does not result in prolonged inhalation of

excessive toner dusts.

Skin contact : Unlikely to cause skin irritation.

Eye contact : May cause transient eye irritation.

Ingestion Use of this product as intended does not result in ingestion.

Indication of any immediate medical attention and special treatment needed

: No additional information available.

### **SECTION 5: Firefighting measures**

#### **Extinguishing media**

Suitable extinguishing media

: Water spray, foam, powder, CO<sub>2</sub> or dry chemical.

Unsuitable extinguishing media

: None specified.

# Special hazards arising from the substance or mixture

Hazardous combustion products

Carbon dioxide. Carbon monoxide.

Advice for firefighters

Fire-fighting procedures

Pay attention not to blow away dust.

Drain water off around and decrease the atmosphere temperature to

extinguish the fire.

Protective equipment for firefighters

None specified.

## **SECTION 6: Accidental release measures**

#### Personal precautions, protective equipment and emergency procedures

Avoid inhalation, ingestion, eye and skin contact in case of accidental release.

Avoid formation of dust. Provide adequate ventilation.

#### **Environmental precautions**

: Do not allow to enter into surface water or drains.

#### Methods and material for containment and cleaning up

Method for cleaning up

: Gather the released powder not to blow away and wipe up with a wet cloth.



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#### **SECTION 7: Handling and storage**

Precautions for safe handling

: Do not attempt to force open or destroy the toner container or unit.

See installation guide of this product.

### Conditions for safe storage, including any incompatibilities

Keep the toner container or unit tightly closed and store in a cool, dry and dark place keeping away from fire. Keep out of the reach of children.

# SECTION 8: Exposure controls/personal protection

Control parameters

(Reference data)

US ACGIH TLV (TWA)

Particles: 10 mg/m³ (Inhalable particles), 3 mg/m³ (Respirable particles)

Manganese inorganic compounds (Ferrite component): 0.1 mg/m² (Inhalable fraction), 0.02 mg/m² (Respirable fraction) (as Mn)

Titanium dioxide: 10 mg/m3

#### US OSHA PEL (TWA)

Particles: 15 mg/m³ (Total dust), 5 mg/m³ (Respirable fraction)

Manganese compounds (Ferrite component): 5 mg/m³ (Ceiling) (as Mn)

Amorphous silica: 80 mg/m³/%SiO<sub>2</sub> Titanium dioxide: 15 mg/m³ (Total dust)

Australian exposure standards: Workplace Exposure Standards for Airborne Contaminants, Appendix A

Manganese compounds (Ferrite component): TWA 1 mg/m³ (as Mn)

Titanium dioxide: TWA 10 mg/m³

#### **Exposure controls**

Appropriate engineering controls

Special ventilator is not required under normal intended use.

Use in a well ventilated area.

Personal protective equipment

Respiratory protection, eye protection, hand protection, skin and body

protection are not required under normal intended use.



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## SECTION 9: Physical and chemical properties Information on basic physical and chemical properties

Appearance

Physical state : Solid.

(Fine powder)

Color : Cvan. Odor : Odorless.

Odor threshold No data available.

: No data available.

100-120 °C Melting point (Toner)

Initial boiling point and boiling range : No data available. : No data available. Flash point Evaporation rate No data available. Flammability (solid, gas) : No data available. : No data available.

Upper/lower flammability or explosive

: No data available. Vapour pressure Vapour density No data available.

Relative density 1.2-1.4 g/cm (Toner) Almost insoluble in water. Solubility(ies)

Partition coefficient: n-octanol/water : No data available. No data available. Auto-ignition temperature Decomposition temperature ! No data available. Viscosity : No data available.

Explosive properties : No data available. No data available. Oxidising properties

Other information

Dust explosion is improbable under normal intended use. Dust explosion properties

> Experimental explosiveness of toner is classified into the same rank such kind of powder as flour, dry milk and resin powder according to the pressure rising speed.

**SECTION 10: Stability and reactivity** 

No data available. Reactivity

Chemical stability This product is stable under normal conditions of use and storage.

Possibility of hazardous reactions Hazardous reactions will not occur.

Conditions to avoid None specified. Incompatible materials : None specified.

Hazardous decomposition products are not to be produced. Hazardous decomposition products



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# SECTION 11: Toxicological information Information on toxicological effects

Acute toxicity

Oral (LD<sub>50</sub>)

> 2000 mg/kg (rat)

(Based on test result of similar product.) (Toner)

> 2000 mg/kg (rat)

(Based on test result of constituent materials.) (Carrier)

Dermal (LD<sub>50</sub>)

No data available.

(Toner)

No data available.

(Carrier)

Inhalation (LC<sub>50</sub> (4hr))

? > 5.10 mg/l (rat)

(Based on test result of similar product.) (Toner)

Skin corrosion/irritation

Acute skin irritation

: Non-irritant (rabbit)

(Based on test result of similar product.) (Toner)

Non-irritant (rabbit)

(Based on test result of constituent materials.) (Carrier)

Serious eye damage/irritation

Acute eve irritation

: Mild irritant (rabbit)

(Based on test result of similar product.) (Toner)

Respiratory or skin sensitisation

Skin sensitisation

: Non-sensitiser (mouse)

(Based on test result of similar product.) (Toner)

Non-sensitiser

(Based on test result of constituent materials.) (Carrier)

Germ cell mutagenicity

Ames Test is Negative.

(Based on test result of constituent materials.) (Toner)

Ames Test is Negative.

(Based on test result of constituent materials.) (Carrier)

Information of Ingredients

Carcinogenicity

No mutagen, according to MAK, TRGS905 and (EC) No 1272/2008 Annex VI.

No carcinogen or potential carcinogen according to IARC, Japan Association on Industrial Health, ACGIH, EPA, OSHA, NTP, MAK, California Proposition 65,

TRGS 905 and (EC) No 1272/2008 Annex VI.

(except titanium dioxide)

Information of Ingredients

The IARC reevaluated titanium dioxide as a Group 2B carcinogen (possibly carcinogenic to humans) as the result of inhalation exposure test in rats. But, oral/skin test does not show carcinogenicity. (\*2) In the animal chronic inhalation studies for titanium dioxide, the lung tumor was observed in only rats. It is

estimated that this is attributed to the overload of rat's lung clearance mechanism (overload phenomenon). (\*3) The inhalation of excessive titanium dioxide dose not occur in normal use of this product. Also, epidemiological studies to date have not revealed any evidence of the relation between occupational exposure to titanium dioxide and respiratory tract diseases.



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Reproductive toxicity

Information of Ingredients

No reproductive toxicant according to MAK, California Proposition 65, TRGS905

and (EC) No 1272/2008 Annex VI.

STOT-single exposure

STOT-repeated exposure

: No data available. No data available.

Aspiration hazard

No data available.

Chronic effects

: In a study in rats by chronic inhalation exposure to a typical toner, a mild to moderate degree of lung fibrosis was observed in 92% of the rats in the high concentration (16 mg/m³) exposure group, and a minimal to mild degree of fibrosis was noted in 22% of the animal in the middle (4 mg/m³) exposure group. (\*1) But no pulmonary change was reported in the lowest (1 mg/m³) exposure group, the

most relevant level to potential human exposures.

Other information

No data available.

**SECTION 12: Ecological information** 

**Ecotoxicity** 

No data available.

Persistence and degradability

No data available.

Bioaccumulative potential

No data available.

Mobility in soil

No data available.

Other adverse effects

No additional information available.

#### **SECTION 13: Disposal considerations**

Waste treatment methods : Do not attempt to incinerate the toner container or unit and the waste toner

yourself. Dangerous sparks may cause burn.

Any disposal practice should be done under conditions which meet local, state and federal laws and regulations relating to waste (contact local or state environmental

agency for specific rules).

**SECTION 14: Transport information** 

**UN** number

None

UN proper shipping name

: None.

Transport hazard class(es)

: None.

Packing group

: None.

**Environmental hazards** 

: None.

Special precautions for user

No additional information available.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

: Not applicable.

#### **SECTION 15: Regulatory information**

### Safety, health and environmental regulations/legislation specific for the substance or mixture **US** regulations

All ingredients in this product comply with order under TSCA.

Canada regulations

This product is not a WHMIS-controlled product, since we consider it as a Manufactured article.

## EU regulations

This product is not classified as hazardous mixture according to Regulation (EC) No 1272/2008 (CLP).

This product does not contain substances which present a health or environmental hazard within the meaning of CLP.



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#### **SECTION 16: Other information**

To the best of our knowledge, the information contained herein is accurate. However, we cannot assume any liability whatsoever for the accuracy or completeness of the information contained herein.

The contents and format of this SDS are in accordance with Model Code of Practice for Preparation of Safety Data Sheets for Hazardous Chemicals.

Revision information

: SECTION 1 (Address change).

Version

: 04

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Abbreviations and acronyms

GHS

: Globally Harmonized System of Classification and Labelling of Chemicals

CAS

Chemical Abstracts Service

WHS

Work Health and Safety (Australia)

**ACGIH** 

American Conference of Governmental Industrial Hygienists

2016 TLVs and BEIs (Threshold Limit Values for Chemical Substances and

Physica Agents and Biological Exposure Indices)

**OSHA** 

Occupational Safety and Health Administration (29 CFR Part 1910 Subpart Z)

TLV

Threshold Limit Values

PEL TWA

Permissible Exposure LimitsTime Weighted Average

UN

United Nations

IARC

International Agency for Research on Cancer

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(IARC Monographs on the Evaluations of Carcinogenic Risks to Humans)

Environmental Protection Agency (Integrated Risk Information System) (US)

EPA NTP

National Toxicology Program (Report on Carcinogens) (US)

MAK

Maximale Arbeitsplatz-Konzentrationen (List of MAK and BAT Values 2011)

(DFG: Deutsche Forschungsgemeinschaft)

Proposition 65

California, Safe Drinking Water and Toxic Enforcement Act of 1986

TRGS905

Technische Regeln für Gefahrstoffe (Deutschland)

STOT

Specific target organ toxicity

TSCA

Toxic Substances Control Act (US)

WHMIS CLP Workplace Hazardous Materials Information System (Canada)

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

Key literature references and sources for data

(\*1) Pulmonary Response to Toner upon Chronic Inhalation Exposure in Rats H.Muhle et.al Fundamental and Applied Toxicology 17.280-299(1991)

Lung Clearance and Retention of Toner, Utilizing a Tracer Technique, during Chronic Inhalation Exposure in Rats B.Bellmann Fundamental and Applied Toxicology 17.300-313(1991)

(\*2) IARC Monograph on the Evaluation of the Carcinogenic Risk of Chemicals to Humans, Vol.93

(\*3) NIOSH CURRENT INTELLIGENCE BULLETIN "Evaluation of Health Hazard and Recommendation for Occupational Exposure to Titanium Dioxide DRAFT"