## SAFETY DATA SHEET

| SECTION 1: Identification of the substance/mixture and of the company/undertaking |  |
| :---: | :---: |
| Product name | Cyan Toner for ECOSYS P6230cdn, M6230cidn, M6630cidn |
| Consumable name | TK-5274C |
| 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, Quarter One, 1 Epping Road, North Ryde NSW 2113, Australia |
| Telephone number | : +61-2-9888-9999 |

## Emergency telephone number

: 131126 (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:Chixture <br> Chemical name | Identifier <br> CAS No. | Weight\% |
| :--- | :---: | :---: |
| Polyester resin (2 kinds) | Confidential |  |
| Organic pigment | Confidential | $75-85$ |
| Amorphous silica | $7631-86-9$ | $1-5$ |
| Titanium dioxide | $13463-67-7$ | $1-5$ |
|  |  | $<1$ |

Information of Ingredients
See section 8 for the information of occupational exposure limits.

## SAFETY DATA SHEET

## SECTION 4: First aid measures

Description of first aid measures

| Inhalation | 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, $\mathrm{CO}_{2}$ 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.

## SAFETY DATA SHEET

## SECTION 7: Handling and storage <br> 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: $10 \mathrm{mg} / \mathrm{m}^{3}$ (Inhalable particles), $3 \mathrm{mg} / \mathrm{m}^{3}$ (Respirable particles)
Titanium dioxide: $10 \mathrm{mg} / \mathrm{m}^{3}$

## US OSHA PEL (TWA)

Particles: $15 \mathrm{mg} / \mathrm{m}^{3}$ (Total dust), $5 \mathrm{mg} / \mathrm{m}^{3}$ (Respirable fraction)
Amorphous silica: $80 \mathrm{mg} / \mathrm{m}^{3} / \% \mathrm{SiO}_{2}$
Titanium dioxide: $15 \mathrm{mg} / \mathrm{m}^{3}$ (Total dust)

Australian exposure standards: Workplace Exposure Standards for Airborne Contaminants, Appendix A
Titanium dioxide: TWA $10 \mathrm{mg} / \mathrm{m}^{3}$

## Exposure controls

Appropriate engineering controls

Personal protective equipment
: Special ventilator is not required under normal intended use. Use in a well ventilated area.
: Respiratory protection, eye protection, hand protection, skin and body protection are not required under normal intended use.

## SAFETY DATA SHEET

## SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties
Appearance

| Physical state | Solid. <br> (Fine powder) |  |
| :---: | :---: | :---: |
| Color | Cyan. |  |
| Odor | Odorless. |  |
| Odor threshold | No data available. |  |
| pH | No data available. |  |
| Melting point | 100-120 ${ }^{\circ} \mathrm{C}$ | (Toner) |
| Initial boiling point and boiling range | No data available. |  |
| Flash point | No data available. |  |
| Evaporation rate | No data available. |  |
| Flammability (solid, gas) | No data available. |  |
| Upper/lower flammability or explosive limits | No data available. |  |
| Vapour pressure | No data available. |  |
| Vapour density | No data available. |  |
| Relative density | 1.2-1.4 g/an | (Toner) |

Solubility(ies) : Almost insoluble in water.
Partition coefficient: n -octanol/water : No data available.
Auto-ignition temperature : No data available.
Decomposition temperature : No data available.
Viscosity : No data available.
Explosive properties : No data available.
Oxidising properties : No data available.

## Other information

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

Reactivity
Chemical stability
Possibility of hazardous reactions
Conditions to avoid
Incompatible materials
Hazardous decomposition products

No data available.
: This product is stable under normal conditions of use and storage.
: Hazardous reactions will not occur.
: None specified.
: None specified.
: Hazardous decomposition products are not to be produced.

## SAFETY DATA SHEET

```
SECTION 11: Toxicological information
Information on toxicological effects
Acute toxicity
Oral (LD 50) : > 2000 mg/kg (rat)
    (Based on test result of similar product.) (Toner)
Dermal (L\mp@subsup{D}{50}{}) : No data available.
                            (Toner)
Inhalation (LC }\mp@subsup{\textrm{FO}}{0}{(4\textrm{hr}))}:\quad:>5.0\textrm{mg}/\textrm{l}(\mathrm{ 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)
Serious eye damage/irritation
Acute eye irritation : Minimal 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)
```

Germ cell mutagenicity
: Ames Test is Negative.
(Toner)

Information of Ingredients : No mutagen, according to MAK, TRGS905 and (EC) No 1272/2008 Annex VI. Carcinogenicity

Information of Ingredients : 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)
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 does 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.

## SAFETY DATA SHEET

Reproductive toxicity
Information of Ingredients

STOT-single exposure
STOT-repeated exposure
Aspiration hazard Chronic effects
: No reproductive toxicant according to MAK, California Proposition 65, TRGS905 and (EC) No 1272/2008 Annex VI.
: No data available.
: No data available.
: No data available.
: 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 ( $16 \mathrm{mg} / \mathrm{m}^{3}$ ) exposure group, and a minimal to mild degree of fibrosis was noted in $22 \%$ of the animal in the middle ( $4 \mathrm{mg} / \mathrm{m}^{3}$ ) exposure group. (*1) But no pulmonary change was reported in the lowest ( $1 \mathrm{mg} / \mathrm{m}^{3}$ ) 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. |

[^0]
## SAFETY DATA SHEET

## 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 : Update of the Revision date.
Version : 02
Issue date : 16/11/2017

Revision date : 19/06/2023
Abbreviations and acronyms

GHS
CAS
WHS
ACGIH

OSHA
TLV
PEL
TWA
UN
IARC

EPA
NTP
MAK

Proposition 65
TRGS905
STOT
TSCA
WHMIS
CLP
: Globally Harmonized System of Classification and Labelling of Chemicals
: Chemical Abstracts Service
: Work Health and Safety (Australia)
: American Conference of Governmental Industrial Hygienists 2016 TLVs and BEIs (Threshold Limit Values for Chemical Substances and Physica Agents and Biological Exposure Indices)
: Occupational Safety and Health Administration (29 CFR Part 1910 Subpart Z)
: Threshold Limit Values
: Permissible Exposure Limits
: Time Weighted Average
: United Nations
: International Agency for Research on Cancer (IARC Monographs on the Evaluations of Carcinogenic Risks to Humans)
: Environmental Protection Agency (Integrated Risk Information System) (US)
: National Toxicology Program (Report on Carcinogens) (US)
: Maximale Arbeitsplatz-Konzentrationen (List of MAK and BAT Values 2011) (DFG: Deutsche Forschungsgemeinschaft)
: California, Safe Drinking Water and Toxic Enforcement Act of 1986
: Technische Regeln für Gefahrstoffe (Deutschland)
: Specific target organ toxicity
: Toxic Substances Control Act (US)
: 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"


[^0]:    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).

