

  Printer – Kyocera Ecosys P2040DN – 168 Medical						
Product Name	Black Toner for ECOSYS P2040dn, P2040DW – TK-1160		Risk Assessment Number	134		
Manufacturer	Kyocera		Product Code			
Manufacturer Contact Number	KYOCERA Document Solutions Inc +31 (0) 6540000 MSDS@deu.kyocera.com		Manufacturer's CAS Ref. (on Safety Data Sheet)	CAS 1317-61-9 CAS 42405-40-3		
Manufacturer Safety Data Sheet (MSDS)	Yes		Date of MSDS	09/09/2016 (no revision – TC checked with manufacturer)		
Hazard Classifications <i>(Tick as appropriate)</i> This is classified as not hazardous according to regulation EC 1272/2008 GHS	☐	 Explosive	☐	 Corrosive	☐	 Acute toxicity
	☐	 Flammable	☒	 Hazardous to the environment	☐	 Health hazard/Irritant/Hazardous to the ozone layer
	☐	 Oxidising	☐	 Serious health hazard	☐	 Gas under pressure
	This is classified as not hazardous according to regulation EC 1272/2008 GHS					
Are Any Hazardous Substances Produced by any Processes?	NO					
Who might it effect? 	This is classified as not hazardous according to regulation EC 1272/2008 GHS					
Controls in Place	☐	Total enclosure of the process	☐	Partial enclosure of the process	☒	General workplace ventilation
	☐	Wet methods (to control dust)	☐	Respiratory Protection	☐	Eye Protection
	☒	Gloves	☐	Overalls	☐	Other

Precautions & Personal Protection 	Good Ventilation, Gloves, Apron		
Emergency First Aid 	Swallowed: Rinse out the mouth. Drink one or two glasses of water to dilute. Seek medical treatment if necessary	In contact with eyes: Immediately flush with plenty of water and see a doctor if irritating	
	Contact with Skin: Wash with soap and water as a precaution	Inhaled: Remove to fresh air and gargle with plenty of water Consult a doctor in case of such symptoms as coughing	
Action in case of Emergency 	This product will not be a hazard as we do not store the product in his powder form		
Environmental Implications 	Do not allow to enter surface water or drains		
Storage, Disposal & Transport 	Storage A small supply <1kg is stored in xxxxxxxxxxxx	Disposal Dispose of waste in the container provided and return to the facilities team for recycling	Transport Single use units are provided as needed via the facilities team
Overall Assessment of Risk of Current Use of the Substance 	☒ Low A low-risk score means the substance poses minimal danger under normal working conditions and when proper controls (e.g., PPE, ventilation) are in place. Routine monitoring is sufficient, and there is no immediate concern for harm.	☐ Medium A medium-risk score indicates a moderate chance of harm. This suggests that additional precautions or stricter controls may be required to prevent exposure, such as improving handling procedures or enhancing protective measures.	☐ High A high-risk score means there is a significant likelihood of harm, either due to the nature of the substance or insufficient controls. Immediate action is required to eliminate or reduce exposure to an acceptable level, such as substituting the substance, upgrading safety measures, or improving training and supervision.
Improvements Required	Are the current controls effective?		Yes
	Does the MSDS suggest any controls that we don't have in place?		No
	Is air monitoring considered appropriate?		No
	Can the process be re-engineered?		No
	Have we considered the use of an alternative, less dangerous substance?		Yes
Assessment Completed by	Name: Stuart Burgess	Role: Team Manager	Date: 01/03/2026 Review date 01/03/2027

KYOCERA

SAFETY DATA SHEET

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

1.1. Product identifier

Product name Black Toner for ECOSYS P2040dn, P2040dw

Consumable name TK-1160

Product form Mixture

1.2. 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.

1.3. 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 Europe B.V.

Address Bloemlaan 4, 2132 NP Hoofddorp, The Netherlands

Telephone number +31(0)20-6540000

E-mail msds@deu.kyocera.com

1.4. Emergency telephone number

: For safety questions, please contact each sale site during office hours.

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 (CLP)

: Not classified as hazardous mixture.

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP)

Not applicable.

2.3. Other hazards

Assessment of PBT/vPvB No data available.

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

3.2. Mixtures

Chemical name	Identifier CAS No.	Weight%
Polyester resin	Confidential	45-55
Magnetite	Confidential	35-45
Aluminium compound	Confidential	<2
Amorphous silica	7631-86-9	<2
Titanium dioxide	13463-67-7	< 1

Information of Ingredients

(1) Substance which present a health or environmental hazard within the meaning of CLP

: None.

(2) Substance which are assigned Community workplace exposure limits

: None.

(3) Substance which are PBT or vPvB in accordance with the criteria set out in Annex XIII of REACH

: None.

(4) Substance which are included in the list established in accordance with Article 59(1) of REACH (SVHC)

: None.

See section 16 for the full text of the H statements declared above.

SECTION 4: First aid measures

4.1. 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.

4.2. 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.

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

: No additional information available.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Water spray, foam, powder, CO ₂ or dry chemical.
Unsuitable extinguishing media	None specified.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products	: Carbon dioxide. Carbon monoxide.
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5.3. 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

6.1. 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.

6.2. Environmental precautions

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

6.3. 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.

6.4. Reference to other sections

See section 13 for disposal information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- : Do not attempt to force open or destroy the toner container or unit.
- See installation guide of this product.

7.2. 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.

7.3. Specific end use(s)

No additional information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

(Reference data)

US ACGIH Threshold Limit Values (TWA)

Particles: 10 mg/rri (Inhalable particles), 3 mg/m (Respirable particles)
Aluminium insoluble compounds : 1 mg/m' (Respirable fraction)
Titanium dioxide: 10 mg/m'

US OSHA PEL (TWA)

Particles: 15 mg/m (Total dust), 5 mg/m (Respirable fraction)
Amorphous silica: 80 mg/m' /%SiO,
Titanium dioxide: 15 mg/m' (Total dust)

EU Occupational exposure limits: Directive 2000/39/EC, 2006/15/EC and 2009/161/EU

Not listed.

8.2. 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.

Environmental exposure controls

No additional information available.



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state	Solid. (Fine powder)
Color	Black.
Odor	Odorless.
Odor threshold	No data available.
pH	No data available.
Melting point	100-120 °C (Toner)
Boiling point	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	1.5-1.8g/clil" (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.

9.2. 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

10.1. Reactivity

No data available.

10.2. Chemical stability

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

10.3. Possibility of hazardous reactions

Hazardous reactions will not occur.

10.4. Conditions to avoid

None specified.

10.5. Incompatible materials

None specified.

10.6. Hazardous decomposition products

: Hazardous decomposition products are not to be produced.



SECTION 11: Toxicological information

11.1. Information on toxicological effects

Based on available data, the classification criteria listed below are not met.

Acute toxicity

Oral (LD ₅₀)	> 2000 mg/kg (rat) (Based on test result of similar product.) (Toner)
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Dermal (LD ₅₀)	No data available. (Toner)
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Inhalation (LC ₅₀ (4hr))	> 5.16 mg/l (rat) (Based on test result of similar product.) (Toner)
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Skin corrosion/irritation

Acute skin irritation	Non-irritant (rabbit) (Based on test result of similar product.) (Toner)
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Serious eye damage/irritation

Acute eye irritation	: Mild irritant (rabbit) (Based on test result of similar product.) (Toner)
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Respiratory or skin sensitisation

Skin sensitisation	Non-sensitiser (mouse) (Based on test result of similar product.) (Toner)
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Germ cell mutagenicity

	Ames Test is Negative. (Toner)
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Information of Ingredients Carcinogenicity

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

The IARC reevaluated titanium dioxide as a Group 28 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.

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	No data available.
STOT-repeated exposure	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/m) exposure group, and a minimal to mild degree of fibrosis was noted in 22% of the animal in the middle (4 mg/m) exposure group. (*1) But no pulmonary change was reported in the lowest (1 mg/m) exposure group, the most relevant level to potential human exposures.
Other information	No data available.

SECTION 12: Ecological information

12.1. Toxicity	No data available.
12.2. Persistence and degradability	No data available.
12.3. Bioaccumulative potential	No data available.
12.4. Mobility in soil	No data available.
12.5. Results of PBT and vPvB assessment	No data available.
12.6. Other adverse effects	No additional information available.

SECTION 13: Disposal considerations

13.1. 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).
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SECTION 14: Transport information

14.1. UN number	None.
14.2. UN proper shipping name	None.
14.3. Transport hazard class(es)	None.
14.4. Packing group	None.
14.5. Environmental hazards	None.
14.6. Special precautions for user	: No additional information available.
14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	: Not applicable.

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 Annex II

: Not listed.

Regulation (EC) No 850/2004 on persistent organic pollutants, Annex I as amended

: Not listed.

Regulation (EC) No 689/2008 concerning the export and import of dangerous chemicals, Annex I and Annex V as amended

: Not listed.

Regulation (EC) No 1907/2006, REACH Annex XVII as amended (Restrictions on use)

: Not listed.

Regulation (EC) No 1907/2006, REACH Annex XIV as amended (Authorisations)

: Not listed.

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.

15.2. Chemical safety assessment

: No data available.

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 SOS are in accordance with Regulation (EC) No 1907/2006, Annex II as amended by Regulation (EU) No 453/2010 with respect to SDSs.

Revision information

Version : 01

Full text of H statements under sections 3.

Not applicable.

Abbreviations and acronyms

PST	Persistent, Bioaccumulative and Toxic
vPvB	Very Persistent and Very Bioaccumulative
SVHC	Substances of Very High Concern
CAS	Chemical Abstracts Service
ACGIH	American Conference of Governmental Industrial Hygienists 2016 TLVs and BEIs (Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices)
OSHA	Occupational Safety and Health Administration (29 CFR Part 1910 Subpart Z)
TWA	Time Weighted Average
PEL	Permissible Exposure Limits
UN	United Nations
IARC	International Agency for Research on Cancer (IARC Monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Humans)
EPA	Environmental Protection Agency (Integrated Risk Information System) (US)
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	Workplace Hazardous Materials Information System (Canada)
REACH	Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals
CLP	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"