1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product Name: IMAGING UNIT IUP35K

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommend use: Toner or Developer for electrophotographic printers
used for: bizhub C4050i/C3350i/C4051i/C3351i, 4750i/4050i/4751i/4051i

1.3. Details of the supplier of the safety data sheet

Supplier Identification:

Konica Minolta Business Solutions U.S.A., Inc.
100 Williams Drive, Ramsey, New Jersey 07446, U.S.A.
Telephone: 201-825-4000

1.4. Emergency telephone number

CHEMTREC
Telephone: 1-800-424-9300

2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Classification: Not classified as dangerous.

Hazard Communication Standard (USA)

Classification: Not classified as dangerous.

2.2. Label elements

Precautionary pictograms:	---
Signal word:	---
Hazard Statement:	---
Precautionary Statements:	---

2.3. Other hazards

Dust explosion (like most finely divided organic powders).

3. COMPOSITION / INFORMATION ON INGREDIENTS

3.2. Mixtures

Major Ingredients:

[Generic Name]	[CAS No.]	[%]
Ferrite Iron oxide	1309-37-1	60-70
. Manganese oxide	1344-43-0	15-25
. Magnesium oxide	1309-48-4	1-10
Styrene acrylic resin	+++	1-10
Acryl resin	+++	1-10
Polyester resin	+++	1-10
Carbon black	1333-86-4	< 1
Amorphous silica (except HMDS treated silica (CAS. 68909-20-6))	7631-86-9	<0.1
silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica	68909-20-6	<0.1

+++: Supplier's confidential information

Hazardous Ingredients:

Chemical Name: Carbon black

CAS No.: 1333-86-4

EINECS-No.: 215-609-9 REACH Registration number: 01-2119384822-32-XXXX

NTP(USA): Not listed IARC Monographs: Group 2B

California Proposition 65(USA): Listed

H code(EC): Not applicable DFG-MAK(GER): III 3B

Chemical Name: Manganese oxide

CAS No.: 1344-43-0 EINECS-No.: 215-695-8

H code(EC): Not applicable

Chemical Name: silanamine, 1,1,1-trimethyl-N-(trimethylsilyl)-, hydrolysis products with silica

CAS No.: 68909-20-6 EINECS-No.: 272-697-1

H code(EC): STOT RE 2, H373

4. FIRST-AID MEASURES

4.1. Description of first aid measures

Ingestion: Wash out mouth with water. Drink one or two glasses of water. If symptoms occur, get medical attention.

Inhalation: Move victim to fresh air immediately. If symptoms occur, get medical attention.

Eye Contact: Immediately flush eyes with plenty of water for 15 minutes. If symptoms occur, get medical attention.

Skin Contact: Wash with water and mild soap.

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

Not available.

5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media: CO2, water spray, foam and dry chemical

Extinguishing Media to Avoid: Full water jet

5.2. Special hazards arising from the substance or mixture

Fire and Explosion Hazards: If dispersed in air, like most finely divided organic powders, may form an explosive mixture.

5.3. Advice for firefighters

Protection of Firefighters: Use self-contained breathing apparatus(SCBA).

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protective equipment (See Section 8).

6.2. Environmental precautions

None

6.3. Methods and material for containment and cleaning up

Vacuum or sweep material and place in a bag and hold for waste disposal.

Use vacuum equipped with High Efficiency Particulate Air(HEPA) filter.

Vacuum should be electrically bonded and grounded to dispel static electricity.

To avoid dust generation, do not sweep dry.

6.4. Reference to other sections

None

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Technical Measures: None

Precautions: Do not breathe dust. Avoid contact with eyes.

Safe Handling Advice: Try not to disperse the particulates.

7.2. Conditions for safe storage, including any incompatibilities

Technical Measures: None

Storage Conditions: Keep container closed. Store in a cool and dry place. Keep out of reach of children.

Incompatible Products: None

Packaging Materials: Bottles or Cartridge designated by KonicaMinolta.

7.3. Specific end use(s)

Not available.

8. EXPOSURE CONTROLS/PERSONAL PROTECTIO

8.1. Control parameters

Control Parameters (As total dust)

ACGIH-TLV (USA): 10mg/m3 (Inhalable particles), 3.0 mg/m3 (Respirable particles)
OSHA-PEL (USA): 15mg/m3 (Total dusts), 5.0 mg/m3 (Respirable fraction)
DFG-MAK (GER): 4mg/m3 (Inhalable fraction), 1.5mg/m3 (Respirable fraction)
Safe Work Australia-TWA: 10mg/m3

Control Parameters (As Ingredients: Carbon black)

ACGIH-TLV (USA): 3mg/m3
OSHA Z-Table (USA): 3.5mg/m3
Safe Work Australia-TWA: 3mg/m3

Control Parameters (As Ingredients: Manganese oxide)

ACGIH-TLV(USA): 0.1mg/m3(Mn;Inharable Fraction)
0.02mg/m3(Mn;Respirable Fraction)
OSHA Z-Tables(USA):ceiling 5mg/m3
EU-OEL(EU): 0.2mg/m3(Mn; Inhalable fraction)
0.05mg/m3(Mn;Respirable Fraction)
Safe Work Australia-TWA: 1mg/m3(Mn)

Control Parameters

(As Ingredients: silicon dioxide including crystalline and amorphous silica)

ACGIH-TLV(USA): 10mg/m3(As Inhalable Fraction)
3mg/m3(As Respirable Fraction)
OSHA Z-Tables(USA): 5mg/m3(As Respirable Fraction)

8.2. Exposure controls

Engineering Measures

Ventilation: None required with intended use.

Personal Protective Equipment

Not required under normal conditions. For use other than in normal operating procedures (such as in the event of large spill), goggles and respirators may be required.

Hygiene Measures: Wash hands after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	
Physical State: Solid	Color: Black
Form: Powder (mean dia. is 30-40 um by volume)	
Odor:	Almost odorless
Odor threshold:	No data available
Melting Point(°C)/[F]:	No data available
Boiling Point(°C):	Not applicable
Flammability (solid, gas):	No data available
Flash Point(°C):	Not applicable
Auto-Ignition Temperature(°C):	No data available
Decomposition temperature:	Not applicable
PH	Not applicable
Upper/ lower flammability or explosive limits	No data available
Explosion Properties:	No data available
Evaporation rate:	No data available
Vapor Pressure:	Not applicable
Vapor density:	Not applicable
Density:	No data available
Viscosity:	Not applicable
Kinematic viscosity:	Not applicable
Solubility:	Insoluble in water.
Partition Coefficient, n-Octanol/Water:	Not applicable
Particle characteristics:	No data available

9.2. Other information

No data available

10. STABILITY AND REACTIVITY

10.1. Reactivity

Hazardous Polymerization: Will not occur.

10.2. Chemical stability

Stable except above 200C(392F).

10.3. Possibility of hazardous reactions

Dust explosion, like most finely divided organic powders.

10.4. Conditions to avoid

Conditions to avoid: Electric discharge, throwing into fire.

Materials to Avoid: Oxidizing materials.

10.5. Incompatible materials

No Information.

10.6. Hazardous decomposition products

CO, CO2, and smoke.

11. TOXICOLOGICAL INFORMATION

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute Toxicity:

Ingestion(oral), LD50(mg/kg): >2000(Rat) *

Dermal, LD50(mg/kg): No data available

Inhalation, LC50(mg/l): No data available

Eye irritation: No data available

Skin irritation: No data available

Skin sensitizer: No data available

Local Effects: see Chronic Toxicity or Long term Toxicity

Chronic Toxicity or Long Term Toxicity:

In a two-year inhalation study of chronic toxicity and carcinogenicity using a typical toner in rats, there were no lung changes at all in the lowest exposure level (1mg/m3), the most relevant level to potential human exposures. A minimal to mild degree of fibrosis was noted in 22% of the animals at the middle exposure level (4mg/m3), and a mild to moderate degree of fibrosis was observed in 92% of the rats at the highest exposure level(16mg/m3). The lung changes observed in the higher exposure groups are interpreted in terms of "lung overloading", a series of generic responses to the presence of large quantities of respirable, insoluble and relatively benign dusts retained for extended time periods in the lungs. Lung tumor frequency was unchanged among rats exposed to toner at the three exposure levels, and for air-only control rats.

Carcinogenicity

The IARC reevaluated carbon black as a Group 2B carcinogen (possible human carcinogen). This evaluation is given to Carbon Black for which there is inadequate human evidence, but sufficient animal evidence. The latter is based upon the development of lung tumors in rats receiving chronic inhalation exposures to free carbon black at levels that induce particle overload of the lung.

Studies performed in animal models other than rats have not demonstrated an association between carbon black and lung tumors. Moreover, a two-year cancer bioassay using a typical toner preparation containing carbon black demonstrated no association between toner exposure and tumor development in rats.

Mutagenicity: Negative * (AMES test)

Teratogenicity: No data available

(*= Based on data for other Konica Minolta Products with similar ingredients)

11.2. Information on other hazards

No data available.

12. ECOLOGICAL INFORMATION

No data are available on the adverse effects of this material on the environment.

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. Endocrine disrupting properties

No data available

12.7. Other adverse effects

No data available

13. DISPOSAL CONSIDERATION

13.1. Waste treatment methods

When disposing of the waste or recovered material, consult federal, state and/or local regulations for the proper disposal method.

14. TRANSPORT INFORMATION

14.1. UN number or ID number

None (Not a dangerous good under IATA or IMDG.)

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

None

14.7. Maritime transport in bulk according to IMO instruments

None

15. REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU Information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006 and Commission Regulation (EU) 2020/878.

・Regulation (EC) No 1005/2009 of the European Parliament and of the Council on Substances That Deplete the Ozone Layer: Not applicable

・Regulation (EU) 2019/1021 of the European Parliament and of the Council on Persistent Organic Pollutants (POPs): Not applicable

・Regulation (EU) No 649/2012 of the European Parliament and of the Council on Concerning the Export and Import of Dangerous Chemicals (PIC): Not applicable

・Directive 2012/18/EU of the European Parliament and of the Council on the Control of Major-Accident Hazards Involving Dangerous Substances, Amending and Subsequently Repealing Council Directive 96/82/EC, (Seveso III): Not applicable

・Regulation (EC) No 1907/2006 of the European Parliament and of the Council:

- Annex XIV- List of Substances Subject To Authorization: Not applicable
- Annex XVII- Restrictions on the Manufacture, Placing on the Market and Use of Certain Dangerous Substances, Preparations and Articles: Not applicable

US Information

TSCA (Toxic Substances Control Act):

All chemical substances in this product comply with all applicable rules or order under TSCA.

California Proposition 65:

Ingredient carbon black subject to California Proposition 65 is bound in polymer-matrices so that warnings are not required.

CERCLA(Comprehensive Environmental Response Compensation and Liability Act) :

None of the chemicals in this product have an RQ.

SARA Title III (Superfund Amendments and Reauthorization Act) 302 Extreme Hazardous Substance :

None.

311/312 Hazard Categories :

None.

313 Reportable Ingredients :

None.

15.2. Chemical safety assessment

For this product a chemical safety assessment was not carried out.

16. OTHER INFORMATION

Prepared Date: 14-Mar-2018
Revised Date: 26-Jan-2024

HMIS Rating: The National Paint and Coating Association (USA): Health: 1 Flammability: 1 Reactivity: 0

Full text of H phrases:

STOT RE: Specific target organ toxicity -repeated exposure

H373: May cause damage to organs (lungs) through prolonged or repeated exposure

Explanation of term: IARC 2B means "possible human carcinogen".

Abbreviations:

ACGIH-TWA: Threshold Limit Value of American Conference of Government Industrial Hygienists
CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act
DFG-MAK: Maximale Arbeitsplatz-Konzentration by Deutsche Forschuugsgemeinschaft
DGR: Dangerous Goods Regulations
EINECS: European Inventory of Existing Commercial Chemical Substances
H-Code: Hazard Code
HMIS: Hazardous Materials Identification System
IARC: International Agency for Research on Cancer
IATA: International Air Transport Association
IMDG: International Maritime Dangerous Goods Code
NTP: National Toxicology Program
OEL: Occupational exposure limit
OSHA: Occupational Safety and Health Administration
PBT: Persistent, Bioaccumulative and Toxic
SARA: Superfund Amendments and Reauthorization Act
TSCA: Toxic Substances Control Act
vPvB: very Persistent and very Bioaccumulative

Revision Information: Regular revision on revised date.

Literature References:

ANSI Z400.1-1993
ISO 11014-1
Commission Directive 91/155/EEC
IARC(2010): IARC monographs on the Evaluation of the Carcinogenic Risk of Chemicals to Humans, Vol. 93, Carbon Black, Titanium Dioxide, and Talc, Lyon, pp. 43-191
H.Muhle, B.Bellmann, O.Creutzenberg, C.Dasenbrock, H.Ernst, R.Kilpper, J.C.MacKenzie, P.Morrow, U.Mohr, S.Takenaka, and R.Mermelstein(1991)
Pulmonary Response to Toner upon Chronic Inhalation Exposure in Rats. Fundamental and Applied Toxicology 17, pp.280-299.

Restrictions:

The above information is believed to be accurate and represents the best information currently available to Our Corporation. However, Our Corporation makes no warranty with respect to such information, and Our Corporation assumes no liability resulting from its use. Users should make their own investigation to determine the suitability of the information for their particular purposes.