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MSDS No.: MFP-3962

Product Name: DV614M

Prepared date:15-Oct-2011 Revised Date: 4-Jan-2016

# PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical State: Solid Color: Red

Form: Powder (mean dia. is 30-40um by volume)

Odor:

Almost odorless

PH

Not applicable

Boiling Point(°C):

Not applicable

Melting Point(°C):

Around No data available /[] (Softening Point)

Flash Point(°C):

Not applicable

Auto-Ignition Temperature(°C):

No data available No data available

Upper/ lower flammability or explosive limits

**Explosion Properties:** 

No data available

Evaporation rate:

No data available

Vapor Pressure: Vapor density:

Not applicable

Specific Gravity:

Not applicable 5.0

Solubility:

Insoluble in water.

Partition Coefficient, n-Octanol/Water:

Not applicable

Decomposition temperature:

Not applicable

# 10. STABILITY AND REACTIVITY

Reactivity:

None.

Stability:

Stable except above 200C(392F).

Hazardous Reactions:

Dust explosion, like most finely divided organic powders.

Conditions to avoid:

Electric discharge, throwing into fire.

Materials to Avoid:

Oxidizing materials.

Hazardous Decomposition Products: CO, CO2, and smoke.

Hazardous Polymerization:

Will not occur.



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MSDS No.: MFP-3962

Product Name: DV614M

Prepared date:15-Oct-2011 Revised Date: 4-Jan-2016

### 11. TOXICOLOGICAL INFORMATION

Acute Toxicity:

Ingestion(oral), LD50(mg/kg):

>2000 (Rat) \*

Dermal, LD50(mg/kg):

No data available

Inhalation, LC50(mg/l):

No data available

Eye imitation:

No data available

Skin imitation:

No data available

Skin sensitizer:

No data available

Local Effects: see Chronic Toxicity or Long term Toxicity

Chronic Toxicity or Long Term Toxicity:

Prolonged inhalation of excessive dust may cause lung damage. It is attributed to "lung overloading", a generic response to excessive amounts of any dust retained in the lungs for a prolonged interval. Use of this product, as intended, does not result in inhalation of excessive dust.

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 rats in the high concentration(16mg/m³) exposure group, and a minimal to mild degree of fibrosis was noted in 22% of the animals in the middle(4mg/m³) exposure group. But no pulmonary change was reported in the lowest(1mg/m³) exposure group, the most relevant level to potential human exposures.

Carcinogenicity

IARC Monographs:

Not listed

NTP(USA):

Not listed

OSHA Regulated(USA):

Not listed

Mutagenicity:

Negative \* (AMES test)

Teratogenicity:

No data available

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

#### 12. ECOLOGICAL INFORMATION

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

Ecotoxicity:

No data available

Mobility:

No data available

Persistence and degradability: No data available

Bioaccumulative potential:

No data available

# 13. DISPOSAL CONSIDERATION

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



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MSDS No.: MFP-3962

Product Name: DV614M

Prepared date:15-Oct-2011 Revised Date: 4-Jan-2016

#### 14. TRANSPORT INFORMATION

Information on Code and Classifications According to International Regulations

**UN Classification: None** 

Further information: Not a dangerous good under IATA or IMDG.

Hazchem code (Austl.): None

#### 15. REGULATORY INFORMATION

**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:

This product contains no chemical substances subject to California Proposition 65.

CERCLA(Comprehensive Environmental Response Compensation and Liability Act):

None.

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

None.

311/312 Hazard Categories:

None.

313 Reportable Ingredients:

None.

#### **EU** Information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

- Regulation (EC) No 2037/2000 of the European Parliament and of the Council on Substances That Deplete the Ozone Layer: Not applicable
- · Regulation (EC) No 850/2004 of the European Parliament and of the Council on Persistent Organic Pollutants and Amending Directive 79/117/EEC (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

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



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MSDS No.: MFP-3962

Product Name: DV614M

Prepared date:15-Oct-2011 Revised Date: 4-Jan-2016

#### 16. OTHER INFORMATION

HMIS Rating: The National Paint and Coating Association (USA): Health: 1 Flammability: 1 Reactivity: 0 Explanation of term: IARC 2B means "possible human carcinogen".

Abbreviations:

neviauoris.

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.



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MSDS No.: MFP-3952

Product Name: DV614Y

Prepared date:15-Oct-2011 Revised Date: 4-Jan-2016

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

Product Name: DV614Y

used for: PRESS C1070/C1070P/C1060/C71cf, PRO C1060L

Supplier Identification:

Konica Minolta Business Solutions (Canada), Ltd. 369 Britannia Road East Mississauga, Ontario L4Z 2H5

Telephone: (905)890-6600

Facsimile: (905)283-2511

Emergency Telephone No.

**CHEMTREC** 

Telephone: 1-800-424-9300

WHMIS: This product is NOT subject to the controlled products regulations.

# 2. HAZARDS IDENTIFICATION

## Regulation (EC) No 1272/2008

Classification: Not classified as dangerous.

# **Hazard Communication Standard (USA)**

Classification: Not classified as dangerous.

#### LABEL ELEMENTS

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

# Other Hazards

Dust explosion (like most finely divided organic powders).



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MSDS No.: MFP-3952

Product Name: DV614Y

Prepared date: 15-Oct-2011 Revised Date: 4-Jan-2016

# 3. COMPOSITION / INFORMATION ON INGREDIENTS

Substance [ ]

Preparation [X]

# 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
Amorphous silica		7631-86-9	<1

+++: Supplier's confidential information

Hazardous Ingredients:

Chemical Name: Manganese oxide

CAS No.: 1344-43-0 Symbol(EC): Not listed

# 4. FIRST-AID MEASURES

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

EINECS-No.: 215-695-8 H code(EC): Not listed

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.

# 5. FIRE-FIGHTING MEASURES

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

Extinguishing Media to Avoid: Full water jet

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

mixture.

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



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MSDS No.: MFP-3952

Product Name: DV614Y

Prepared date:15-Oct-2011 4-Jan-2016 Revised Date:

#### 6. ACCIDENTAL RELEASE **MEASURES**

Personal Precautions:

None

Environmental Precautions: None

Methods for Cleaning Up: Wear personal protective equipment(See Section 8). 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.

# 7. HANDLING AND STORAGE

Handling

Technical Measures: None

Precautions:

Do not breathe dust. Avoid contact with eyes.

Safe Handling Advice: Try not to disperse the particulates.

Storage

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 Konica Minolta.

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Engineering Measures** 

Ventilation:

None required with intended use.

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: Manganese oxide)

ACGIH-TLV(USA): 0.1mg/m3(Mn;Inharable Fraction)

0.02mg/m3(Mn;Respirable Fraction)

OSHA Z-Tables(USA):ceiling 5mg/m3

Safe Work Australia-TWA: 1mg/m3

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.



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MSDS No.: MFP-3952

Product Name: DV614Y

Prepared date:15-Oct-2011 Revised Date: 4-Jan-2016

# 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical State: Solid Color: Yellow

Form: Powder (mean dia. is 30-40um by volume)

Odor:

Almost odorless

PH

Not applicable

Boiling Point(°C):

Not applicable Around No data available / (Softening Point)

Melting Point(°C): Flash Point(°C):

Not applicable

Auto-Ignition Temperature(°C):

No data available

Upper/ lower flammability or explosive limits

No data available

**Explosion Properties:** 

No data available

Evaporation rate: Vapor Pressure:

No data available

Vapor density:

Not applicable Not applicable

Specific Gravity:

5.0

Solubility:

Insoluble in water.

Partition Coefficient, n-Octanol/Water.

Not applicable

Decomposition temperature:

Not applicable

# 10. STABILITY AND REACTIVITY

Reactivity:

None.

Stability:

Stable except above 200C(392F).

Hazardous Reactions:

Dust explosion, like most finely divided organic powders.

Conditions to avoid:

Electric discharge, throwing into fire.

Materials to Avoid:

Oxidizing materials.

Hazardous Decomposition Products: CO, CO2, and smoke.

Hazardous Polymerization:

Will not occur.



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MSDS No.: MFP-3952

Product Name: DV614Y

Prepared date:15-Oct-2011 Revised Date: 4-Jan-2016

### 11. TOXICOLOGICAL INFORMATION

Acute Toxicity:

Ingestion(oral), LD50(mg/kg):

>2000 (Rat) \*

Demal, LD50(mg/kg):

No data available

Inhalation, LC50(mg/l):

No data available

Eye imitation:

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:

Prolonged inhalation of excessive dust may cause lung damage. It is attributed to "lung overloading", a generic response to excessive amounts of any dust retained in the lungs for a prolonged interval. Use of this product, as intended, does not result in inhalation of excessive dust.

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 rats in the high concentration(16mg/m³) exposure group, and a minimal to mild degree of fibrosis was noted in 22% of the animals in the middle(4mg/m³) exposure group. But no pulmonary change was reported in the lowest(1mg/m³) exposure group, the most relevant level to potential human exposures.

Carcinogenicity

IARC Monographs:

Not listed

NTP(USA):

Not listed

OSHA Regulated(USA):

Not listed

Mutagenicity:

Negative \* (AMES test)

Teratogenicity:

No data available

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

#### 12. ECOLOGICAL INFORMATION

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

Ecotoxicity:

No data available

Mobility:

No data available

Persistence and degradability: No data available

Bioaccumulative potential:

No data available

# 13. DISPOSAL CONSIDERATION

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



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MSDS No.: MFP-3952

Product Name: DV614Y

Prepared date:15-Oct-2011 Revised Date: 4-Jan-2016

#### 14. TRANSPORT INFORMATION

Information on Code and Classifications According to International Regulations

**UN Classification: None** 

Further information: Not a dangerous good under IATA or IMDG.

Hazchem code (Austl.): None

### 15. REGULATORY INFORMATION

**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:

This product contains no chemical substances subject to California Proposition 65.

CERCLA(Comprehensive Environmental Response Compensation and Liability Act):

None

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

None.

311/312 Hazard Categories:

None.

313 Reportable Ingredients:

None.

#### **EU** Information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

- $\cdot$  Regulation (EC) No 2037/2000 of the European Parliament and of the Council on Substances That Deplete the Ozone Layer: Not applicable
- Regulation (EC) No 850/2004 of the European Parliament and of the Council on Persistent Organic Pollutants and Amending Directive 79/117/EEC (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

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



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MSDS No.: MFP-3952

Product Name: DV614Y

Prepared date:15-Oct-2011 Revised Date: 4-Jan-2016

#### 16. OTHER INFORMATION

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

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MSDS No.: MFP-2972

Product Name: TN619C, TN620C

Prepared date:15-Oct-2011 Revised Date: 4-Jan-2016

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

Product Name: TN619C, TN620C

used for: PRESS C1070/C1070P/C1060, PRO C1060L

Supplier Identification:

Konica Minolta Business Solutions (Canada), Ltd. 369 Britannia Road East Mississauga, Ontario L4Z 2H5

Telephone: (905)890-6600

Facsimile: (905)283-2511

Emergency Telephone No.

**CHEMTREC** 

Telephone: 1-800-424-9300

WHMIS: This product is NOT subject to the controlled products regulations.

### 2. HAZARDS IDENTIFICATION

# Regulation (EC) No 1272/2008

Classification: Not classified as dangerous.

# Hazard Communication Standard (USA)

Classification: Not classified as dangerous.

# **LABEL ELEMENTS**

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

# Other Hazards

Dust explosion (like most finely divided organic powders).



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MSDS No.: MFP-2972

Product Name: TN619C, TN620C

Prepared date:15-Oct-2011 Revised Date: 4-Jan-2016

# 3. COMPOSITION / INFORMATION ON INGREDIENTS

Substance [ ]

Preparation [X]

# Major Ingredients:

[Generic Name]	[CAS No.]	[%]
Styrene acrylic resin	+++	70-80
Ferrite Iron oxide	1309-37-1	1-10
. Manganese oxide	1344-43-0	1-10
Wax		1-10
Organic pigment	147-14-8	1-10
Amorphous silica	7631-86-9	1-10
Titanium dioxide	13463-67-7	<1

+++: Supplier's confidential information

Hazardous Ingredients:

Chemical Name: Titanium dioxide

CAS No.: 13463-67-7 EINECS-No.: 236-675-5

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

Symbol(EC): Not listed H code(EC): Not listed

Chemical Name: Manganese oxide

CAS No.: 1344-43-0 EINECS-No.: 215-695-8 Symbol(EC): Not listed H code(EC): Not listed

# 4. 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: Flush eyes with plenty of water for 15 minutes. If symptoms occur, get medical attention.

Skin Contact: Wash with water and mild soap.

### 5. FIRE-FIGHTING MEASURES

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

Extinguishing Media to Avoid: Full water jet

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

mixture.

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



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MSDS No.: MFP-2972

Product Name: TN619C, TN620C

Prepared date:15-Oct-2011

Revised Date: 4-Jan-2016

#### 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions:

None

**Environmental Precautions: None** 

Methods for Cleaning Up: Wear personal protective equipment(See Section 8). 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.

### 7. HANDLING AND STORAGE

Handling

Technical Measures: None

Precautions:

Do not breathe dust. Avoid contact with eyes.

Safe Handling Advice: Try not to disperse the particulates.

Storage

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 Konica Minolta.

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Engineering Measures** 

Ventilation:

None required with intended use.

Control Parameters(As total dust)

ACGIH-TLV(USA):

10mg/m3 (Inhalable particles), 3.0 mg/m3 (Respirable particles)

o.o mg/mo (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: Titanium dioxide)

ACGIH-TLV(USA): 10mg/m3
OSHA Z-Tables(USA): 15mg/m3
Safe Work Australia-TWA: 10mg/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

Safe Work Australia-TWA: 1mg/m3

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.



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MSDS No.: MFP-2972

Product Name: TN619C, TN620C

Prepared date:15-Oct-2011 Revised Date: 4-Jan-2016

# 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical State: Solid Color: Cyan

Form: Powder (mean dia. is 5-10um by volume)

Odor:

Almost odorless

PH

Not applicable Not applicable

Boiling Point(°C): Melting Point(°C):

Around No data available /[] (Softening Point)

Flash Point(°C):

Not applicable

Auto-Ignition Temperature(°C):

No data available

Upper/ lower flammability or explosive limits

No data available

**Explosion Properties:** 

No data available No data available

Evaporation rate: Vapor Pressure: Vapor density:

Not applicable

Specific Gravity:

Not applicable 1.2

Solubility:

Insoluble in water.

Partition Coefficient, n-Octanol/Water:

Not applicable

Decomposition temperature:

Not applicable

# 10. STABILITY AND REACTIVITY

Reactivity:

None.

Stability:

Stable except above 200C(392F).

Hazardous Reactions:

Dust explosion, like most finely divided organic powders.

Conditions to avoid:

Electric discharge, throwing into fire.

Materials to Avoid:

Oxidizing materials.

Hazardous Decomposition Products: CO, CO2, NOx and smoke.

Hazardous Polymerization:

Will not occur.



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MSDS No.: MFP-2972

Product Name: TN619C, TN620C

Prepared date:15-Oct-2011 Revised Date: 4-Jan-2016

#### 11. TOXICOLOGICAL INFORMATION

Acute Toxicity:

Ingestion(oral), LD50(mg/kg):

>2000 (Rat) \*

Demal, LD50(mg/kg):

No data available

Inhalation, LC50(mg/l):

>5.18 (Rat,4hour) \*(This was the highest attainable concentration.)

Eye imitation:

Minimal imitant (Rabbit) \*

Skin irritation:

Non irrtant (Rabbit) \*

Skin sensitizer:

Non sensitiser (Mouse) \*

Local Effects: see Chronic Toxicity or Long term Toxicity

Chronic Toxicity or Long Term Toxicity:

Prolonged inhalation of excessive dust may cause lung damage. It is attributed to "lung overloading", a generic response to excessive amounts of any dust retained in the lungs for a prolonged interval. Use of this product, as intended, does not result in inhalation of excessive dust.

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 rats in the high concentration(16mg/m³) exposure group, and a minimal to mild degree of fibrosis was noted in 22% of the animals in the middle(4mg/m³) exposure group. But no pulmonary change was reported in the lowest(1mg/m³) exposure group, the most relevant level to potential human exposures.

#### Carcinogenicity

The IARC reevaluated titanium dioxide as a Group 2B carcinogen (possible human carcinogen). In animal chronic inhalation studies, the tumor formulation observed in only rats with animal chronic inhalation study are attributed to "lung overloading", a generic response to excessive amounts of any dust retained in the lungs for a prolonged interval. Use of this product, as intended, dose not result in inhalation of excessive dust. Epidemiological study to date have not revealed any evidence of the relation between exposure to titanium dioxide and diseases of the respiratory tract beyond general effects of dust.

Mutagenicity:

Negative \* (AMES test)

Teratogenicity:

No data available

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

# 12. ECOLOGICAL INFORMATION

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

Ecotoxicity:

No data available

Mobility:

No data available

Persistence and degradability: No data available

Bioaccumulative potential:

No data available

# 13. DISPOSAL CONSIDERATION

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



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MSDS No.: MFP-2972

Product Name: TN619C, TN620C

Prepared date: 15-Oct-2011 Revised Date: 4-Jan-2016

# 14. TRANSPORT INFORMATION

Information on Code and Classifications According to International Regulations

**UN Classification: None** 

Further information: Not a dangerous good under IATA or IMDG.

Hazchem code (Austl.): None

# 15. REGULATORY INFORMATION

**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:

This product contains no chemical substances subject to California Proposition 65.

CERCLA(Comprehensive Environmental Response Compensation and Liability Act):

None.

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

None.

311/312 Hazard Categories:

None.

313 Reportable Ingredients:

None.

#### **EU** Information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

- · Regulation (EC) No 2037/2000 of the European Parliament and of the Council on Substances That Deplete the Ozone Layer: Not applicable
- Regulation (EC) No 850/2004 of the European Parliament and of the Council on Persistent Organic Pollutants and Amending Directive 79/117/EEC (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

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



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MSDS No.: MFP-2972

Product Name: TN619C, TN620C

Prepared date: 15-Oct-2011 Revised Date: 4-Jan-2016

# 16. OTHER INFORMATION

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

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.

NIOSH CURRENT INTELLIGENCE BULLETIN :Evaluation of Health Hazard and Recommendation for Occupational Exposure to Titanium Dioxide :DRAFT

#### Restrictions:

The above information is believed to be accurate and represents the best information currently available to Our Corporation. However, Our Corporation makes no warrantly 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.



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MSDS No.:MFP-2942

Product Name: TN619K, TN620K

Prepared Date: 15-Oct-2011 Revised Date: 4-Jan-2016

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

Product Name: TN619K, TN620K

used for: PRESS C1070/C1070P/C1060, PRO C1060L

Supplier Identification:

Konica Minolta Business Solutions (Canada), Ltd.

369 Britannia Road East Mississauga, Ontario L4Z 2H5

Telephone: (905)890-6600

Facsimile: (905)283-2511

Emergency Telephone No.

**CHEMTREC** 

Telephone: 1-800-424-9300

WHMIS: This product is NOT subject to the controlled products regulations.

### 2. HAZARDS IDENTIFICATION

Regulation (EC) No 1272/2008

Classification: Not classified as dangerous.

# **Hazard Communication Standard (USA)**

Classification: Not classified as dangerous.

# **LABEL ELEMENTS**

Precautionary pictograms:

\_\_\_

Signal word:

\_

Hazard Statement:

Precautionary Statements:

\_\_\_

#### Other Hazards

Dust explosion (like most finely divided organic powders).



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MSDS No.:MFP-2942

Product Name: TN619K, TN620K

Prepared Date:15-Oct-2011

Revised Date: 4-Jan-2016

# 3. COMPOSITION / INFORMATION ON INGREDIENTS

Substance [ ]

Preparation [X]

Major Ingredients:

•		
[Generic Name]	[CAS No.]	[%]
Styrene acrylic resin	+++	70-80
Ferrite Iron oxide	1309-37-1	1-10
. Manganese oxide	1344-43-0	1-10
Carbon black	1333-86-4	1-10
Wax	+++	1-10
Amorphous silica	7631-86-9	1-10
Organic pigment	147-14-8	<1
Titanium dioxide	13463-67-7	<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

Symbol(EC): Not listed H code(EC): Not listed

DFG-MAK(GER): III 3B

Chemical Name: Titanium dioxide

CAS No.: 13463-67-7 EINECS-No.: 236-675-5 NTP(USA): Not listed IARC Monographs: Group 2B

Symbol(EC): Not listed H code(EC): Not listed

Chemical Name: Manganese oxide

CAS No.: 1344-43-0 EINECS-No.: 215-695-8 Symbol(EC): Not listed H code(EC): Not listed

4. 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.

#### 5. FIRE-FIGHTING MEASURES

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

Extinguishing Media to Avoid: Full water jet

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

mixture.

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



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MSDS No.:MFP-2942

Product Name: TN619K, TN620K

Prepared Date: 15-Oct-2011 Revised Date: 4-Jan-2016

#### 6. ACCIDENTAL RELEASE **MEASURES**

Personal Precautions:

None

**Environmental Precautions: None** 

Methods for Cleaning Up: Wear personal protective equipment(See Section 8). 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.

#### 7. HANDLING AND STORAGE

Handling

Technical Measures:

None

Precautions:

Do not breathe dust. Avoid contact with eyes.

Safe Handling Advice: Try not to disperse the particulates.

Storage

**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 Konica Minolta.

### **EXPOSURE CONTROLS/PERSONAL PROTECTION**

**Engineering Measures** 

Ventilation:

None required with intended use.

Control Parameters (As total dust)

ACGIH-TLV (USA):

10mg/m3 (Inhalable particles),

3.0 mg/m3 (Respirable particles)

OSHA-PEL (USA): DFG-MAK (GER):

15mg/m3 (Total dusts),

5.0 mg/m3 (Respirable fraction)

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: Titanium dioxide)

ACGIH-TLV(USA): 10mg/m3 OSHA Z-Tables(USA): 15mg/m3 Safe Work Australia-TWA: 10mg/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 Safe Work Australia-TWA: 1mg/m3(Mn)

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.



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MSDS No.:MFP-2942

Product Name: TN619K, TN620K

Prepared Date: 15-Oct-2011 Revised Date: 4-Jan-2016

# PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical State: Solid

Color: Black

Form: Powder (mean dia. is 5-10um by volume)

Odor:

Almost odorless

PH

Not applicable

Boiling Point(°C):

Not applicable

Melting Point(°C)/[F]:

Around No data available / (Softening Point)

Flash Point(°C):

Not applicable

Auto-Ignition Temperature(°C):

No data available No data available

Upper/ lower flammability or explosive limits

No data available

**Explosion Properties:** 

Evaporation rate:

No data available

Vapor Pressure:

Not applicable Not applicable

Vapor density: Specific Gravity:

1.2

Solubility:

Insoluble in water.

Partition Coefficient, n-Octanol/Water:

Not applicable

Decomposition temperature:

Not applicable

#### 10. STABILITY AND REACTIVITY

Reactivity:

Stability:

Stable except above 200C(392F).

Hazardous Reactions:

Dust explosion, like most finely divided organic powders.

Conditions to avoid:

Electric discharge, throwing into fire.

Materials to Avoid:

Oxidizing materials.

Hazardous Decomposition Products: CO, CO2, NOx and smoke.

Hazardous Polymerization:

Will not occur.



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MSDS No.:MFP-2942

Product Name: TN619K, TN620K

Prepared Date: 15-Oct-2011 Revised Date: 4-Jan-2016

#### 11. TOXICOLOGICAL INFORMATION

Acute Toxicity:

Ingestion(oral), LD50(mg/kg):

>2000(Rat)\*

Demal, LD50(mg/kg):

No data available

Inhalation, LC50(mg/l):

>5.11(Rat,4hour) \*

(This was the highest attainable concentration.)

Eye imitation:

Minimal imitant(Rabbit) \*

Skin imitation:

Non irritant(Rabbit) \*

Skin sensitizer:

Non sensitiser (Mouse) \*

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.

The IARC reevaluated titanium dioxide as a Group 2B carcinogen (possible human carcinogen), In animal chronic inhalation studies, the tumor formulation observed in only rats with animal chronic inhalation study are attributed to "lung overloading", a generic response to excessive amounts of any dust retained in the lungs for a prolonged interval. Use of this product, as intended, dose not result in inhalation of excessive dust. Epidemiological study to date have not revealed any evidence of the relation between exposure to titanium dioxide and diseases of the respiratory tract beyond general effects of dust.

Mutagenicity:

Negative \*(AMES test)

Teratogenicity:

No data available

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

### 12. ECOLOGICAL INFORMATION

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

Ecotoxicity:

No data available

Mobility:

No data available

Persistence and degradability: No data available

Bioaccumulative potential:

No data available



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MSDS No.:MFP-2942

Product Name: TN619K, TN620K

Prepared Date: 15-Oct-2011 Revised Date: 4-Jan-2016

# 13. DISPOSAL CONSIDERATION

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

#### 14. TRANSPORT INFORMATION

Information on Code and Classifications According to International Regulations

UN Classification: None

Further information: Not a dangerous good under IATA or IMDG.

Hazchem code (Austl.): None

# 15. REGULATORY INFORMATION

**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.

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

None.

311/312 Hazard Categories:

None.

313 Reportable Ingredients:

None.

#### **EU** Information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

- Regulation (EC) No 2037/2000 of the European Parliament and of the Council on Substances That Deplete the Ozone Layer: Not applicable
- Regulation (EC) No 850/2004 of the European Parliament and of the Council on Persistent Organic Pollutants and Amending Directive 79/117/EEC (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

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



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MSDS No.:MFP-2942

Product Name: TN619K, TN620K

Prepared Date: 15-Oct-2011 Revised Date: 4-Jan-2016

### 16. OTHER INFORMATION

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

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.

NIOSH CURRENT INTELLIGENCE BULLETIN: Evaluation of Health Hazard and Recommendation for Occupational Exposure to Titanium Dioxide: DRAFT

#### 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.

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MSDS No.: MFP-2962

Product Name: TN619M, TN620M

Prepared date:15-Oct-2011 Revised Date: 4-Jan-2016

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

Product Name: TN619M, TN620M

used for: PRESS C1070/C1070P/C1060, PRO C1060L

Supplier Identification:

Konica Minolta Business Solutions (Canada), Ltd. 369 Britannia Road East Mississauga, Ontario L4Z 2H5

Telephone: (905)890-6600 Facsimile: (905)283-2511

Emergency Telephone No.

CHEMTREC

Telephone: 1-800-424-9300

WHMIS: This product is NOT subject to the controlled products regulations.

# 2. HAZARDS IDENTIFICATION

# Regulation (EC) No 1272/2008

Classification: Not classified as dangerous.

### Hazard Communication Standard (USA)

Classification: Not classified as dangerous.

# **LABEL ELEMENTS**

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

### Other Hazards

Dust explosion (like most finely divided organic powders).



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MSDS No.: MFP-2962

Product Name: TN619M, TN620M

Prepared date:15-Oct-2011 Revised Date: 4-Jan-2016

# 3. COMPOSITION / INFORMATION ON INGREDIENTS

Substance [ ]

Preparation [X]

# Major Ingredients:

[Generic Name]	[CAS No.]	[%]
Styrene acrylic resin	+++	70-80
Ferrite Iron oxide	1309-37-1	1-10
. Manganese oxide	1344-43-0	1-10
Wax	+++	1-10
Organic pigment	+++	1-10
Amorphous silica	7631-86-9	1-10
Titanium dioxide	13463-67-7	<1

# +++: Supplier's confidential information

Hazardous Ingredients:

Chemical Name: Titanium dioxide

CAS No.: 13463-67-7 EINECS-No.: 236-675-5

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

Symbol(EC): Not listed H code(EC): Not listed

Chemical Name: Manganese oxide

CAS No.: 1344-43-0 EINECS-No.: 215-695-8 Symbol(EC): Not listed H code(EC): Not listed

# 4. 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: Flush eyes with plenty of water for 15 minutes. If symptoms occur, get medical attention.

Skin Contact: Wash with water and mild soap.

#### 5. FIRE-FIGHTING MEASURES

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

Extinguishing Media to Avoid: Full water jet

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

mixture.

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



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MSDS No.: MFP-2962

Product Name: TN619M, TN620M

Prepared date:15-Oct-2011 Revised Date: 4-Jan-2016

#### 6. ACCIDENTAL RELEASE **MEASURES**

Personal Precautions:

None

**Environmental Precautions: None** 

Methods for Cleaning Up: Wear personal protective equipment(See Section 8). 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.

# 7. HANDLING AND STORAGE

Handling

Technical Measures: None

Precautions:

Do not breathe dust. Avoid contact with eyes.

Safe Handling Advice: Try not to disperse the particulates.

Storage

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 Konica Minolta.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Engineering Measures** 

Ventilation:

None required with intended use.

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: Titanium dioxide)

ACGIH-TLV(USA): 10mg/m3 OSHA Z-Tables(USA): 15mg/m3 Safe Work Australia-TWA: 10mg/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

Safe Work Australia-TWA: 1mg/m3

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.



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MSDS No.: MFP-2962

Product Name: TN619M, TN620M

Prepared date:15-Oct-2011 Revised Date: 4-Jan-2016

# PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Color: Red Physical State: Solid

Form: Powder (mean dia. is 5-10um by volume)

Odor:

Almost odorless

PH

Not applicable Not applicable

Boiling Point(°C): Melting Point(°C):

Around No data available /[] (Softening Point)

Flash Point(°C):

Not applicable

Auto-Ignition Temperature(°C):

No data available No data available

Upper/ lower flammability or explosive limits

No data available

**Explosion Properties:** Evaporation rate:

No data available

Vapor Pressure: Vapor density:

Not applicable

Specific Gravity:

Not applicable 1.2

Solubility:

Insoluble in water.

Partition Coefficient, n-Octanol/Water:

Not applicable

Decomposition temperature:

Not applicable

### 10. STABILITY AND REACTIVITY

Reactivity:

None.

Stability:

Stable except above 200C(392F).

Hazardous Reactions:

Dust explosion, like most finely divided organic powders.

Conditions to avoid:

Electric discharge, throwing into fire.

Materials to Avoid:

Oxidizing materials.

Hazardous Decomposition Products: CO, CO2, NOx and smoke.

Hazardous Polymerization:

Will not occur.



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MSDS No.: MFP-2962

Product Name: TN619M, TN620M

Prepared date:15-Oct-2011 Revised Date: 4-Jan-2016

# 11. TOXICOLOGICAL INFORMATION

Acute Toxicity:

Ingestion(oral), LD50(mg/kg):

>2000 (Rat) \*

Demal, LD50(mg/kg):

No data available

Inhalation, LC50(mg/l):

>5.15 (Rat,4hour) \*(This was the highest attainable concentration.)

Eye imitation:

Minimal imitant (Rabbit) \*

Skin imitation:

Non imitant (Rabbit) \*

Skin sensitizer:

No sensitiser (Mouse) \*

Local Effects: see Chronic Toxicity or Long term Toxicity

Chronic Toxicity or Long Term Toxicity:

Prolonged inhalation of excessive dust may cause lung damage. It is attributed to "lung overloading", a generic response to excessive amounts of any dust retained in the lungs for a prolonged interval. Use of this product, as intended, does not result in inhalation of excessive dust.

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 rats in the high concentration(16mg/m³) exposure group, and a minimal to mild degree of fibrosis was noted in 22% of the animals in the middle(4mg/m³) exposure group. But no pulmonary change was reported in the lowest(1mg/m³) exposure group, the most relevant level to potential human exposures.

# Carcinogenicity

The IARC reevaluated titanium dioxide as a Group 2B carcinogen (possible human carcinogen). In animal chronic inhalation studies, the tumor formulation observed in only rats with animal chronic inhalation study are attributed to "lung overloading", a generic response to excessive amounts of any dust retained in the lungs for a prolonged interval. Use of this product, as intended, dose not result in inhalation of excessive dust. Epidemiological study to date have not revealed any evidence of the relation between exposure to titanium dioxide and diseases of the respiratory tract beyond general effects of dust.

Mutagenicity:

Negative \* (AMES test)

Teratogenicity:

No data available

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

#### 12. ECOLOGICAL INFORMATION

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

Ecotoxicity:

No data available

Mobility:

No data available

Persistence and degradability: No data available Bioaccumulative potential:

No data available

#### 13. DISPOSAL CONSIDERATION

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



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MSDS No.: MFP-2962

Product Name: TN619M, TN620M

Prepared date:15-Oct-2011 Revised Date: 4-Jan-2016

### 14. TRANSPORT INFORMATION

Information on Code and Classifications According to International Regulations

UN Classification: None

Further information: Not a dangerous good under IATA or IMDG.

Hazchem code (Austl.): None

# 15. REGULATORY INFORMATION

**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:

This product contains no chemical substances subject to California Proposition 65.

CERCLA(Comprehensive Environmental Response Compensation and Liability Act):

None

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

None.

311/312 Hazard Categories:

None

313 Reportable Ingredients:

None.

#### **EU** Information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

- · Regulation (EC) No 2037/2000 of the European Parliament and of the Council on Substances That Deplete the Ozone Layer: Not applicable
- Regulation (EC) No 850/2004 of the European Parliament and of the Council on Persistent Organic Pollutants and Amending Directive 79/117/EEC (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

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



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MSDS No.: MFP-2962

Product Name: TN619M, TN620M

Prepared date:15-Oct-2011 Revised Date: 4-Jan-2016

### 16. OTHER INFORMATION

HMIS Rating:

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

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.Emst, 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.

NIOSH CURRENT INTELLIGENCE BULLETIN : Evaluation of Health Hazard and Recommendation for Occupational Exposure to Titanium Dioxide :DRAFT

### Restrictions:

The above information is believed to be accurate and represents the best information currently available to Our Corporation. However, Our Corporation makes no warrantly 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.

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MSDS No.: MFP-2952

Product Name: TN619Y, TN620Y

Prepared date: 15-Oct-2011 Revised Date: 4-Jan-2016

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

Product Name: TN619Y, TN620Y

used for: PRESS C1070/C1070P/C1060, PRO C1060L

Supplier Identification:

Konica Minolta Business Solutions (Canada), Ltd. 369 Britannia Road East Mississauga, Ontario L4Z 2H5

Telephone: (905)890-6600

Facsimile: (905)283-2511

Emergency Telephone No.

**CHEMTREC** 

Telephone: 1-800-424-9300

WHMIS: This product is NOT subject to the controlled products regulations.

# 2. HAZARDS IDENTIFICATION

# Regulation (EC) No 1272/2008

Classification: Not classified as dangerous.

## **Hazard Communication Standard (USA)**

Classification: Not classified as dangerous.

## **LABEL ELEMENTS**

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

### Other Hazards

Dust explosion (like most finely divided organic powders).



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MSDS No.: MFP-2952

Product Name: TN619Y, TN620Y

Prepared date:15-Oct-2011 Revised Date: 4-Jan-2016

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

Substance [ ]

Preparation [X]

Major Ingredients:

[Generic Name]	[CAS No.]	[%]		
Styrene acrylic resin	+++	70-80		
Ferrite Iron oxide	1309-37-1	1-10		
. Manganese oxide	1344-43-0	1-10		
Wax	+++	1-10		
Organic pigment	+++	1-10		
Amorphous silica	7631-86-9	1-10		
Titanium dioxide	13463-67-7	<1		

+++: Supplier's confidential information

Hazardous Ingredients:

Chemical Name: Titanium dioxide

CAS No.: 13463-67-7 NTP(USA): Not listed

Symbol(EC): Not listed

Chemical Name: Manganese oxide

CAS No.: 1344-43-0 Symbol(EC): Not listed EINECS-No.: 236-675-5

IARC Monographs: Group 2B

H code(EC): Not listed

EINECS-No.: 215-695-8 H code(EC): Not listed

## 4. 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:

Flush eyes with plenty of water for 15 minutes. If symptoms occur, get medical attention.

Skin Contact: Wash with water and mild soap.

# 5. FIRE-FIGHTING MEASURES

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

Extinguishing Media to Avoid: Full water jet

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

mixture.

Protection of Firefighters:

Use self-contained breathing apparatus(SCBA).



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MSDS No.: MFP-2952

Product Name: TN619Y, TN620Y

Prepared date: 15-Oct-2011 Revised Date: 4-Jan-2016

### 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions:

None

**Environmental Precautions: None** 

Methods for Cleaning Up: Wear personal protective equipment(See Section 8). 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.

### 7. HANDLING AND STORAGE

Handling

Technical Measures: None

Precautions:

Do not breathe dust. Avoid contact with eyes.

Safe Handling Advice: Try not to disperse the particulates.

Storage

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 Konica Minolta.

#### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Engineering Measures** 

Ventilation:

None required with intended use.

Control Parameters(As total dust)

ACGIH-TLV(USA):

10mg/m3 (Inhalable particles), 3.0 mg/m3 (Respirable particles)

E O manimala fraction

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: Titanium dioxide)

ACGIH-TLV(USA): 10mg/m3
OSHA Z-Tables(USA): 15mg/m3
Safe Work Australia-TWA: 10mg/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 Safe Work Australia-TWA: 1mg/m3

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.



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MSDS No.: MFP-2952

Product Name: TN619Y, TN620Y

Prepared date:15-Oct-2011 Revised Date: 4-Jan-2016

# 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical State: Solid Color: Yellow

Form: Powder (mean dia. is 5-10um by volume)

Odor:

PH Not applicable

Boiling Point(°C): Not applicable

Melting Point(°C): Around No data available /[] (Softening Point)

Almost odorless

Flash Point(°C):

Auto-Ignition Temperature(°C):

Upper/ lower flammability or explosive limits

Explosion Properties:

No data available

No data available

Evaporation rate:

Vapor Pressure:

Vapor density:

No data available

Not applicable

Not applicable

Specific Gravity: 1.2

Solubility: Insoluble in water.

Partition Coefficient, n-Octanol/Water: Not applicable

Decomposition temperature: Not applicable

# 10. STABILITY AND REACTIVITY

Reactivity: None.

Stability: Stable except above 200C(392F).

Hazardous Reactions: Dust explosion, like most finely divided organic powders.

Conditions to avoid: Electric discharge, throwing into fire.

Materials to Avoid: Oxidizing materials.

Hazardous Decomposition Products: CO, CO2, NOx and smoke.

Hazardous Polymerization: Will not occur.



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MSDS No.: MFP-2952

Product Name: TN619Y, TN620Y

Prepared date: 15-Oct-2011 Revised Date: 4-Jan-2016

### 11. TOXICOLOGICAL INFORMATION

Acute Toxicity:

Ingestion(oral), LD50(mg/kg):

>2000 (Rat) \*

Dermal, LD50(mg/kg):

No data available

Inhalation, LC50(mg/l):

>5.19 (Rat,4hour) \*(This was the highest attainable concentration.)

Eye imitation:

Minimal imitant (Rabbit) \*

Skin imitation:

Non imitant (Rabbit) \*

Skin sensitizer:

Non sensitiser (Mouse) \*

Local Effects: see Chronic Toxicity or Long term Toxicity

Chronic Toxicity or Long Term Toxicity:

Prolonged inhalation of excessive dust may cause lung damage. It is attributed to "lung overloading", a generic response to excessive amounts of any dust retained in the lungs for a prolonged interval. Use of this product, as intended, does not result in inhalation of excessive dust.

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 rats in the high concentration(16mg/m³) exposure group, and a minimal to mild degree of fibrosis was noted in 22% of the animals in the middle(4mg/m³) exposure group. But no pulmonary change was reported in the lowest(1mg/m³) exposure group, the most relevant level to potential human exposures.

### Carcinogenicity

The IARC reevaluated titanium dioxide as a Group 2B carcinogen (possible human carcinogen). In animal chronic inhalation studies, the tumor formulation observed in only rats with animal chronic inhalation study are attributed to "lung overloading", a generic response to excessive amounts of any dust retained in the lungs for a prolonged interval. Use of this product, as intended, dose not result in inhalation of excessive dust. Epidemiological study to date have not revealed any evidence of the relation between exposure to titanium dioxide and diseases of the respiratory tract beyond general effects of dust.

Mutagenicity:

Negative \* (AMES test)

Teratogenicity:

No data available

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

### 12. ECOLOGICAL INFORMATION

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

Ecotoxicity:

No data available

Mobility:

No data available

Persistence and degradability: No data available

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Bioaccumulative potential:

No data available

### 13. DISPOSAL CONSIDERATION

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



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MSDS No.: MFP-2952

Product Name: TN619Y, TN620Y

Prepared date:15-Oct-2011 Revised Date: 4-Jan-2016

#### 14. TRANSPORT INFORMATION

Information on Code and Classifications According to International Regulations

**UN Classification: None** 

Further information: Not a dangerous good under IATA or IMDG.

Hazchem code (Austl.): None

#### 15. REGULATORY INFORMATION

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:

This product contains no chemical substances subject to California Proposition 65.

CERCLA(Comprehensive Environmental Response Compensation and Liability Act):

None.

SARA Title III (Superfund Amendments and Reauthorization Act) 302 Extreme Hazardous Substance : None.

311/312 Hazard Categories:

None.

313 Reportable Ingredients:

None.

#### **EU** Information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

- Regulation (EC) No 2037/2000 of the European Parliament and of the Council on Substances That Deplete the Ozone Layer: Not applicable
- Regulation (EC) No 850/2004 of the European Parliament and of the Council on Persistent Organic Pollutants and Amending Directive 79/117/EEC (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

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



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MSDS No.: MFP-2952

Product Name: TN619Y, TN620Y

Prepared date: 15-Oct-2011 Revised Date: 4-Jan-2016

#### 16. OTHER INFORMATION

HMIS Rating:

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

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.Emst, 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.

NIOSH CURRENT INTELLIGENCE BULLETIN : Evaluation of Health Hazard and Recommendation for Occupational Exposure to Titanium Dioxide :DRAFT

#### Restrictions:

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MSDS No.: DPC-1152

Products Name: DRUM (PHOTOCONDUCTOR) DU-105/DU-106

Prepared Date: 14-Oct-2011 Revised Date: 4-Jan-2016

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

Product Name: DRUM (PHOTOCONDUCTOR) DU-105/DU-106

used for: PRESS C1070/C1070P/C1060/C71hc/C71cf, PRO C1060L

Supplier Identification:

Konica Minolta Business Solutions (Canada), Ltd.

369 Britannia Road East Mississauga, Ontario L4Z 2H5

Telephone: (905)890-6600

Facsimile: (905)283-2511

Emergency Telephone No.

**CHEMTREC** 

Telephone: 1-800-424-9300

WHMIS: This product is NOT subject to the controlled products regulations.

## 2. HAZARDS IDENTIFICATION

# Regulation (EC) No 1272/2008

Classification: Not classified as dangerous.

## **Hazard Communication Standard (USA)**

Classification: Not classified as dangerous.

### **LABEL ELEMENTS**

Precautionary pictograms:

\_\_\_\_

Signal word:

Hazard Statement:

....

Precautionary Statements:

# Other Hazards

None



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MSDS No.: DPC-1152

Products Name: DRUM (PHOTOCONDUCTOR) DU-105/DU-106

Prepared Date:14-Oct-2011 Revised Date: 4-Jan-2016

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

Major Ingredients:

[Generic Name]

[CAS No.]

[%]

<5

Substrate

>95

Aluminium drum

7429-90-5

Coating layer

+++

Polycarbonate OPC compound

+++

Organic pigment

+++

+++: Supplier's confidential information

Hazardous Ingredients:

None present

### 4. FIRST-AID MEASURES

Symptoms of Overexposure: No symptoms expected with intended use.

Routes of Entry:

None

Information

Inhalation:

No treatment is required.

Skin Contact:

No treatment is required.

Eye Contact:

No treatment is required.

Ingestion:

No treatment is required.

Note to Physician:

None

### 5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media:

CO2, water, foam and dry chemical

Extinguishing Media to Avoid:

None

Special Firefighting Procedures: None

Fire and Explosion Hazards:

This material has no unusual fire or explosive hazards.

Protection of Firefighters:

No special equipment is required.



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MSDS No.: DPC-1152

Products Name: DRUM (PHOTOCONDUCTOR) DU-105/DU-106

Prepared Date:14-Oct-2011 Revised Date: 4-Jan-2016

## 6. ACCIDENTAL RELEASE MEASURES

Personal Precautions:

Not applicable with intended use. Environmental Precautions: Not applicable with intended use.

Methods for Cleaning Up:

Not applicable with intended use.

## 7. HANDLING AND STORAGE

Handling

Technical Measures: None

Precautions:

This product will be scorched in the case of fire.

Safe Handling Advice: None.

Storage

Technical Measures:

None

Storage Conditions:

Keep and Store in a cool and dry place.

Incompatible Products: None

Packing Materials:

None

## **EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Engineering Measures** 

Ventilation: None required with intended use.

**Control Parameters** 

OSHA-PEL(USA):

Not Applicable

ACGIH-TLV(USA):

Not Applicable

DFG-MAK(EC):

Not Applicable

Safe Work Australia-TWA:

Not Applicable

Personal Protective Equipment

None required when used as intended in Konica Minolta equipment.

Hygiene Measures:

Wash hands after handling.