

(Tnr- 723EU-3)

# **Material Safety Data Sheet**

# Toner Type: OKT1Y / OKT2C / OKT2K / OKT2M

For Models : C9600, C9800 C9650, C9655 C9850 C9750 MFP, C9850 MFP ES3640, ES3640e ES3640 MFP ES2640 MFP

**Oki Data Corporation** 

#### SAFETY DATA SHEET

Conforms to EU Directive 91/155/EEC, as amended by 2001/58/EC

#### TONER-BLACK-OKT2K

#### 1. Identification of the substance/preparation and of the company/undertaking

Product name	:	TONER-BLACK-OKT2K
Code	:	43599301
Manufacturer	:	Oki Data Corporation 3-1, Futaba-cho, Takasaki-shi, GUNMA, 370-8585 JAPAN Tel. +81-27-328-6366. Fax +81-27-328-6396
Supplier	:	Oki (Europe) Ltd. 1 Oki Way, Wardpark , Cumbernauld G68 0FQ, SCOTLAND, UK Tel. +44(0) 1236 502502
Emergency telephone number	:	Tel. +44(0) 1236 502502
Emergency e-mail contact	:	MSDSQuestions@okieurope.com

#### 2. Hazards identification

Potential Health Effects		
Ingestion Effects	:	Ingestion is not applicable route of entry for intended use.
Inhalation Effects	:	Minimal respiratory tract irritation may occur with exposure to large amount
		of toner dust.
Eye Effects	:	Solid or dusts may cause irritation or scratch the surface of eye.
Skin Effects	:	Unlikely to cause skin irritation.
Environmental Hazards	:	No particular hazards known.

#### 3. Composition/information on ingredients

:

**Composition / Information** 

This product is a mixture of below substances.

#### Hazardous ingredients :

Ingredients	CAS No.	Proportion	OSHA PEL	ACGIH TLV	Other Limits
Styrene acrylate	Proprietary	80-95%	Not listed	Not listed	Not available
Wax	Proprietary	5-15%	Not listed	Not listed	Not available
Carbon black	1333-86-4	3-10%	3.5mg/m3	3.5mg/m3	Not available
Silica	7631-86-9	1-3%	20mppcf(*) 80(%SiO2) mg/m3	Not listed	Not available
Titanium dioxide	13463-67-7	0.1-0.9%	15mg/m3	10mg/m3	No known
		•	•	(*) million pa	rticles/cubic foot

Further Information : No known.

Ingestion	:	Dilute stomach contents with several glasses of water. Get medical attention if symptoms persist.
Inhalation	:	Move person to fresh air immediately. If symptoms occur, consult a physician.
Eye contact	:	Immediately flush with large amount of clean water for at least 15 minutes. If irritation persists, consult a physician.
Skin contact	:	Wash affected areas thoroughly with soap and water. If irritation persists, consult a physician.

#### TONER-BLACK-OKT2K

5. Fire-fighting measures		
Extinguishing media	:	Water, foam, dry chemical
Special Fire-fighting Procedure	:	Keep personnel removed from and upwind of fire. Wear respiratory protection. Cool container with water spray.
Unusual Fire & Explosion Hazards	:	Toner material, like most organic material in powder form, is capable of creating a dust explosion.
6. Accidental releas	se m	easures
Spill and Leakage Procedure :	:	Wear personal protective equipment as described in Section 8. Avoid breathing dust. Minimize the release of particles. Vacuum or sweep the material into a bag or other sealed container. Dispose of waste toner in accordance with local requirements.
Environmental precautions	:	Do not discharge into drains .
7. Handling and sto	orage	ġ.
Advise on safe handling and protection against fire	:	Keep material out of reach of children. Avoid inhalation of dust and contact with eyes. Keep away from excessive heat, sparks, and open flames.
Requirements for storage rooms and advice on compatibility	:	Keep out of the reach of children. Keep container closed and store at room temperature. Keep away from strong oxidizers.

#### 8. Exposure controls/personal protection

#### Occupational Exposure Limits For Toner

ACGIH TLV	:	Particulates (Insoluble) Not Otherwise Specified 10mg/m3 (Inhalable Particulate) 3mg/m3 (Respirable Particulate)
Respiratory protection	:	Dust respiratory mask
Ventilation	:	Good general ventilation should be sufficient under intended use.
Protective Gloves	:	Use leather gloves for hand protection.
Eye protection	:	Protecting glasses
Other Protective Equipment	:	Not required under intended use.

Appearance and odor Density	:	Fine powder, black, slight plastic odor. About 1.2g/ cm3
Boiling point	:	Not applicable
Melting point	:	Not applicable
Solubility in Water		Negligible
Solubility		Partially soluble in toluene and THF
in Other Solvent		
Percent Volatile		Not applicable
by Volume		
Flammable Limits		Not applicable
Flash Point		Not applicable
Log Po/w		Not applicable
Explosibility		No data available. According to Annex 1 to Directive 67/548/EEC,
Flammability		the composition materials of this product are not classified as explosive. *1 No data available. According to Annex 1 to Directive 67/548/EEC, the composition materials of this product are not classified as flammable. *1

#### TONER-BLACK-OKT2K

10. Stability and reactivity		
Stability & Reactivity	:	Stable. Hazardous polymerization will not occur.
Materials to Avoid	:	None
Hazardous decomposition	:	Combustion will produce carbon dioxide and, possibly toxic chemicals such as carbon monoxide.
11. Toxicological information		

Acute Effects		
Oral	:	Acute oral toxicity: LD50 > 2000mg/kg (rat). *2
Dermal	:	Acute dermal toxicity: LD50 > 5000mg/kg (rat). *2
Inhalation	:	Acute inhalation toxicity: LC50 > 5.36mg/L (rat). *2
Eye Contact:	:	Eye irritation: Based on the EEC labeling criteria, this product is classified as nonirritant. *
Skin Contact	:	Skin irritation: Based on the EEC labeling criteria, this product is classified as nonirritant.
Sensitization	:	Skin sensitization: This product is not considered to be a contact sensitizer in guinea pigs
Chronic Toxicity		
Oral	:	No test data available. Based on the EC labeling criteria, any components in this product are not required a risk phrase R48 (danger for serious damage to health by prolonged exposure). *1
Dermal	:	No test data available. Based on the EC labeling criteria, any components in this product are not required a risk phrase R48 (danger for serious damage to health by prolonged exposure). *1
Inhalation	:	No test data available. In a study in rats of 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 (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. Based on the EC labeling criteria, any components in this product are not required a risk phrase R48 (danger for serious damage to health by prolonged exposure). *1
Mutagenicity	:	Mutagenicity: This product did not cause a positive response in either the presence or absence of Aroclor-induced rat liver S9. *2
Carcinogenicity	:	No data available. In 1996 the IARC reevaluated carbon black as a Group 2B carcinogen (possible human carcinogen). This classification is given to chemicals for which there are inadequate human evidence, but sufficient animal evidence on which to base an opinion of carcinogenicity. The classification 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 did not show any 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 they will publish a monograph that lists titanium dioxide (TiO2) as possibly carcinogenic to humans (Group 2B) by inhalation (based solely on animal data). Human epidemiology studies do not suggest an increased risk of cancer in humans for occupational exposure to titanium dioxide. IARC stated that exposure levels are assumed to be lower in the user industries, with the possible exception of workers who handle large quantities of titanium dioxide. *1
Reproductive Toxicity	:	No test data available. Based on the EC labeling criteria, any components in this product are not classified as the dangerous category of "toxic for reproduction". *1

#### 12. Ecological information

 Avoid spills and dispose of in accordance with applicable laws and regulations.

 <u>Aquatic Environment</u>
 :

 According to acute toxicity test with Medaka (Oryzias latipes), no toxicological symptom was observed in the control and all concentration levels during exposure (96 hours). \*2

 According to Annex 1 to Directive 67/548/EEC, the composition materials of this product are not classified as dangerous for the environment. \*1

#### TONER-BLACK-OKT2K

#### 13. Disposal considerations

Waste From This Product	:	Waste material may be dumped or incinerated on condition that meets all country, state
Recommendation	:	and local environmental regulations. consult with the disposal agency and the relevant authorities; cleansing agent is water.

#### 14. Transport information

#### International Transport Information

UN Number	:	None
Hazards Class	:	None

#### 15. Regulatory information

Label Information According : None to the DIRECTIVE 1999/45/EC (EU)

Please refer to any other national measures that may be relevant.

#### **16. Other information**

#### MSDS STATUS

<b>—</b>	*4. Openmination Directive 0004/E0/E0 at 0 Assess 0004 a deption to task piceless as
Documents list	: *1: •Commission Directive 2001/59/EC of 6 August 2001 adapting to technical progress
	for the 28th time Council Directive 67/548/EEC on the approximation of the laws,
	regulations and administrative provisions relating to the classification, packaging
	and labeling of dangerous substances
	·IARC Monographs
	•EPA, Proposed Guidelines for Carcinogen Risk Assessment (1986)
	*2: In-house data

#### SAFETY DATA SHEET

Conforms to EU Directive 91/155/EEC, as amended by 2001/58/EC

#### TONER-YELLOW-OKT1Y

#### 1. Identification of the substance/preparation and of the company/undertaking

Product name	:	TONER-YELLOW-OKT1Y
Code	:	42861801
Manufacturer	:	Oki Data Corporation 3-1, Futaba-cho, Takasaki-shi, GUNMA, 370-8585 JAPAN Tel. +81-27-328-6366. Fax +81-27-328-6396
Supplier	:	Oki (Europe) Ltd. 1 Oki Way, Wardpark , Cumbernauld G68 0FQ, SCOTLAND, UK Tel. +44(0) 1236 502502
Emergency telephone number	:	Tel. +44(0) 1236 502502
Emergency e-mail contact	:	MSDSQuestions@okieurope.com

#### 2. Hazards identification

Potential Health Effects		
Ingestion Effects	:	Ingestion is not applicable route of entry for intended use.
Inhalation Effects	:	Minimal respiratory tract irritation may occur with exposure to large amount
		of toner dust.
Eye Effects	:	Solid or dusts may cause irritation or scratch the surface of eye.
Skin Effects	:	Unlikely to cause skin irritation.
Environmental Hazards	:	No particular hazards known.

#### 3. Composition/information on ingredients

:

**Composition / Information** 

This product is a mixture of below substances.

#### Hazardous ingredients :

Ingredients	CAS No.	Proportion	OSHA PEL	ACGIH TLV	Other Limits
Styrene acrylate	Proprietary	80-95%	Not listed	Not listed	Not available
Wax	Proprietary	5-15%	Not listed	Not listed	Not available
Pigment	Proprietary	3-10%	Not listed	Not listed	Not available
Silica	7631-86-9	1-3%	20mppcf(*) 80(%SiO2) mg/m3	Not listed	Not available
Titanium dioxide	13463-67-7	0.1-0.9%	15mg/m3	10mg/m3	No known
		•	-	(*) million pa	rticles/cubic foot

Further Information : No known.

Ingestion	:	Dilute stomach contents with several glasses of water. Get medical attention if symptoms persist.
Inhalation	:	Move person to fresh air immediately. If symptoms occur, consult a physician.
Eye contact	:	Immediately flush with large amount of clean water for at least 15 minutes. If irritation persists, consult a physician.
Skin contact	:	Wash affected areas thoroughly with soap and water. If irritation persists, consult a physician.

#### TONER-YELLOW-OKT1Y

5. Fire-fighting mea	sure	es
Extinguishing media	:	Water, foam, dry chemical
Special Fire-fighting Procedure	:	Keep personnel removed from and upwind of fire. Wear respiratory protection. Cool container with water spray.
Unusual Fire & Explosion Hazards	:	Toner material, like most organic material in powder form, is capable of creating a dust explosion.
6. Accidental releas	se m	easures
Spill and Leakage Procedure :	:	Wear personal protective equipment as described in Section 8. Avoid breathing dust. Minimize the release of particles. Vacuum or sweep the material into a bag or other sealed container. Dispose of waste toner in accordance with local requirements.
Environmental precautions	:	Do not discharge into drains .
7. Handling and sto	orage	<u>,</u>
Advise on safe handling and protection against fire	:	Keep material out of reach of children. Avoid inhalation of dust and contact with eyes. Keep away from excessive heat, sparks, and open flames.
Requirements for storage rooms and advice on compatibility	:	Keep out of the reach of children. Keep container closed and store at room temperature. Keep away from strong oxidizers.

#### 8. Exposure controls/personal protection

#### Occupational Exposure Limits For Toner

ACGIH TLV	:	Particulates (Insoluble) Not Otherwise Specified 10mg/m3 (Inhalable Particulate) 3mg/m3 (Respirable Particulate)
Respiratory protection	:	Dust respiratory mask
Ventilation	:	Good general ventilation should be sufficient under intended use.
Protective Gloves	:	Use leather gloves for hand protection.
Eye protection	:	Protecting glasses
Other Protective Equipment	:	Not required under intended use.

Appearance and odor Density	:	Fine powder, yellow, slight plastic odor. About 1.2g/ cm3
Boiling point	:	Not applicable
Melting point	:	Not applicable
Solubility in Water		Negligible
Solubility		Partially soluble in toluene and THF
in Other Solvent		
Percent Volatile		Not applicable
by Volume		
Flammable Limits		Not applicable
Flash Point		Not applicable
Log Po/w		Not applicable
Explosibility		No data available. According to Annex 1 to Directive 67/548/EEC,
Flammability		the composition materials of this product are not classified as explosive. *1 No data available. According to Annex 1 to Directive 67/548/EEC, the composition materials of this product are not classified as flammable. *1

#### **TONER-YELLOW-OKT1Y**

10. Stability and reactivity		
Stability & Reactivity	:	Stable. Hazardous polymerization will not occur.
Materials to Avoid	:	None
Hazardous decomposition	:	Combustion will produce carbon dioxide and, possibly toxic chemicals such as carbon monoxide.
11. Toxicological	inforr	nation
Acute Effects Oral	:	No test data available. Based on the EC labeling criteria, any components in this product are not classified as the dangerous categories of "very toxic", "toxic" and "harmful" when swallowed. *1

Dermal	:	when swallowed. *1 No test data available. Based on the EC labeling criteria, any components in this product are not classified as the dangerous categories of "very toxic", "toxic" and "harmful"
Inhalation	:	when absorbed via the skin. *1 No test data available. Based on the EC labeling criteria, any components in this product are not classified as the dangerous categories of "very toxic", "toxic" and "harmful" when inhaled. *1
Eye Contact:	:	No test data available. Based on the EC labeling criteria, any components in this product are not classified as the dangerous categories of "irritant" when contacted with the ocular tissue. *1
Skin Contact	:	No test data available. Based on the EC labeling criteria, any components in this product are not classified as the dangerous categories of "irritant" when contacted with the skin. *1
Sensitization	:	No data available. According to Annex 1 to Directive 67/548/EEC, the composition materials of this product are not classified as a sensitizer. *1
Chronic Toxicity		
Oral	:	No test data available. Based on the EC labeling criteria, any components in this product are not required a risk phrase R48 (danger for serious damage to health by prolonged exposure). *1
Dermal	:	No test data available. Based on the EC labeling criteria, any components in this product are not required a risk phrase R48 (danger for serious damage to health by prolonged exposure). *1
Inhalation	:	No test data available. In a study in rats of 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 (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.
		Based on the EC labeling criteria, any components in this product are not required a risk phrase R48 (danger for serious damage to health by prolonged exposure). *1
Mutagenicity	:	Mutagenicity: This product did not cause a positive response in either the presence or absence of Aroclor-induced rat liver S9. *2
Carcinogenicity	:	No data available. IARC has issued a notice that they will publish a monograph that lists titanium dioxide (TiO2) as possibly carcinogenic to humans (Group 2B) by inhalation (based solely on animal data). Human epidemiology studies do not suggest an increased risk of cancer in humans for occupational exposure to titanium dioxide. IARC stated that exposure levels are assumed to be lower in the user industries, with the possible exception of workers who handle large quantities of titanium dioxide. *1
Reproductive Toxicity	:	No test data available. Based on the EC labeling criteria, any components in this product are not classified as the dangerous category of "toxic for reproduction". *1

#### 12. Ecological information

No data available for ecological and wastewater treatment (sewage) systems. Avoid spills and dispose of in accordance with applicable laws and regulations.

Aquatic Environment : No data available. According to Annex 1 to Directive 67/548/EEC, the composition materials of this product are not classified as dangerous for the environment. \*1

#### TONER-YELLOW-OKT1Y

#### 13. Disposal considerations

Waste From This Product	:	Waste material may be dumped or incinerated on condition that meets all country, state
Recommendation	:	and local environmental regulations. consult with the disposal agency and the relevant authorities; cleansing agent is water.

#### 14. Transport information

#### International Transport Information

UN Number	:	None
Hazards Class	:	None

#### 15. Regulatory information

Label Information According : None to the DIRECTIVE 1999/45/EC (EU)

Please refer to any other national measures that may be relevant.

#### 16. Other information

#### MSDS STATUS

Documents list	*1: •Commission Directive 2001/59/EC of 6 August 2001 adapting to technical progress for the 28th time Council Directive 67/548/EEC on the approximation of the laws, regulations and administrative provisions relating to the classification, packaging
	and labeling of dangerous substances ·IARC Monographs volumes
	EPA, Proposed Guidelines for Carcinogen Risk Assessment (1986)
	*2: In-house data

#### SAFETY DATA SHEET

Conforms to EU Directive 91/155/EEC, as amended by 2001/58/EC

#### **TONER-MAGENTA-OKT2M**

#### 1. Identification of the substance/preparation and of the company/undertaking

Product name	:	TONER-MAGENTA-OKT2M
Code	:	43599101
Manufacturer	:	Oki Data Corporation 3-1, Futaba-cho, Takasaki-shi, GUNMA, 370-8585 JAPAN Tel. +81-27-328-6366. Fax +81-27-328-6396
Supplier	:	Oki (Europe) Ltd. 1 Oki Way, Wardpark , Cumbernauld G68 0FQ, SCOTLAND, UK Tel. +44(0) 1236 502502
Emergency telephone number	:	Tel. +44(0) 1236 502502
Emergency e-mail contact	:	MSDSQuestions@okieurope.com

#### 2. Hazards identification

Potential Health Effects		
Ingestion Effects	:	Ingestion is not applicable route of entry for intended use.
Inhalation Effects	:	Minimal respiratory tract irritation may occur with exposure to large amount
		of toner dust.
Eye Effects	:	Solid or dusts may cause irritation or scratch the surface of eye.
Skin Effects	:	Unlikely to cause skin irritation.
Environmental Hazards	:	No particular hazards known.

#### 3. Composition/information on ingredients

:

**Composition / Information** 

This product is a mixture of below substances.

#### Hazardous ingredients :

Ingredients	CAS No.	Proportion	OSHA PEL	ACGIH TLV	Other Limits
Styrene acrylate	Proprietary	80-95%	Not listed	Not listed	Not available
Wax	Proprietary	5-15%	Not listed	Not listed	Not available
Pigment	Proprietary	3-10%	Not listed	Not listed	Not available
Silica	7631-86-9	1-3%	20mppcf(*) 80(%SiO2) mg/m3	Not listed	Not available
Titanium dioxide	13463-67-7	0.1-0.9%	15mg/m3	10mg/m3	No known
		•	-	(*) million pa	rticles/cubic foot

Further Information : No known.

Ingestion	:	Dilute stomach contents with several glasses of water. Get medical attention if symptoms persist.
Inhalation	:	Move person to fresh air immediately. If symptoms occur, consult a physician.
Eye contact	:	Immediately flush with large amount of clean water for at least 15 minutes. If irritation persists, consult a physician.
Skin contact	:	Wash affected areas thoroughly with soap and water. If irritation persists, consult a physician.

#### **TONER-MAGENTA-OKT2M**

5. Fire-fighting mea	sure	2S
Extinguishing media	:	Water, foam, dry chemical
Special Fire-fighting Procedure	:	Keep personnel removed from and upwind of fire. Wear respiratory protection. Cool container with water spray.
Unusual Fire & Explosion Hazards	:	Toner material, like most organic material in powder form, is capable of creating a dust explosion.
6. Accidental releas	se m	easures
Spill and Leakage Procedure :	:	Wear personal protective equipment as described in Section 8. Avoid breathing dust. Minimize the release of particles. Vacuum or sweep the material into a bag or other sealed container. Dispose of waste toner in accordance with local requirements.
Environmental precautions	:	Do not discharge into drains .
7. Handling and sto	orage	)
Advise on safe handling and protection against fire	:	Keep material out of reach of children. Avoid inhalation of dust and contact with eyes. Keep away from excessive heat, sparks, and open flames.
Requirements for storage rooms and advice on compatibility	:	Keep out of the reach of children. Keep container closed and store at room temperature. Keep away from strong oxidizers.

#### 8. Exposure controls/personal protection

#### Occupational Exposure Limits For Toner

ACGIH TLV	:	Particulates (Insoluble) Not Otherwise Specified 10mg/m3 (Inhalable Particulate) 3mg/m3 (Respirable Particulate)
Respiratory protection	:	Dust respiratory mask
Ventilation	:	Good general ventilation should be sufficient under intended use.
Protective Gloves	:	Use leather gloves for hand protection.
Eye protection	:	Protecting glasses
Other Protective Equipment	:	Not required under intended use.

Appearance and odor Density	:	Fine powder, red, slight plastic odor. About 1.2g/ cm3
Boiling point	:	Not applicable
Melting point	:	Not applicable
Solubility in Water		Negligible
Solubility		Partially soluble in toluene and THF
in Other Solvent		
Percent Volatile		Not applicable
by Volume		
Flammable Limits		Not applicable
Flash Point		Not applicable
Log Po/w		Not applicable
Explosibility		No data available. According to Annex 1 to Directive 67/548/EEC,
Flammability		the composition materials of this product are not classified as explosive. *1 No data available. According to Annex 1 to Directive 67/548/EEC, the composition materials of this product are not classified as flammable. *1

#### TONER-MAGENTA-OKT2M

10. Stability and reactivity		
Stability & Reactivity	:	Stable. Hazardous polymerization will not occur.
Materials to Avoid	:	None
Hazardous decomposition	:	Combustion will produce carbon dioxide and, possibly toxic chemicals such as carbon monoxide.
11. Toxicological	inforr	nation
Acute Effects Oral		No test data available. Based on the EC labeling criteria, any components in this product

Oral	No test data available. Based on the EC labeling criteria, any components in this product are not classified as the dangerous categories of "very toxic", "toxic" and "harmful" when swallowed. *1
Dermal	No test data available. Based on the EC labeling criteria, any components in this product are not classified as the dangerous categories of "very toxic", "toxic" and "harmful" when absorbed via the skin. *1
Inhalation	: No test data available. Based on the EC labeling criteria, any components in this product are not classified as the dangerous categories of "very toxic", "toxic" and "harmful" when inhaled. *1
Eye Contact:	: No test data available. Based on the EC labeling criteria, any components in this product are not classified as the dangerous categories of "irritant" when contacted with the ocular tissue. *1
Skin Contact	: No test data available. Based on the EC labeling criteria, any components in this product are not classified as the dangerous categories of "irritant" when contacted with the skin. *1
Sensitization	: No data available. According to Annex 1 to Directive 67/548/EEC, the composition materials of this product are not classified as a sensitizer. *1
Chronic Toxicity	
Oral	<ul> <li>No test data available. Based on the EC labeling criteria, any components in this product are not required a risk phrase R48 (danger for serious damage to health by prolonged exposure). *1</li> </ul>
Dermal	<ul> <li>No test data available. Based on the EC labeling criteria, any components in this product are not required a risk phrase R48 (danger for serious damage to health by prolonged exposure). *1</li> </ul>
Inhalation	<ul> <li>No test data available.</li> <li>In a study in rats of 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 (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.</li> <li>Based on the EC labeling criteria, any components in this product are not required a risk phrase R48 (danger for serious damage to health by prolonged exposure). *1</li> </ul>
Mutagenicity	: Mutagenicity: This product did not cause a positive response in either the presence or absence of Aroclor-induced rat liver S9. *2
Carcinogenicity	No data available. IARC has issued a notice that they will publish a monograph that lists titanium dioxide (TiO2) as possibly carcinogenic to humans (Group 2B) by inhalation (based solely on animal data). Human epidemiology studies do not suggest an increased risk of cancer in humans for occupational exposure to titanium dioxide. IARC stated that exposure levels are assumed to be lower in the user industries, with the possible exception of workers who handle large quantities of titanium dioxide. *1
Reproductive Toxicity	: No test data available. Based on the EC labeling criteria, any components in this product are not classified as the dangerous category of "toxic for reproduction". *1

### 12. Ecological information

No data available for ecological and wastewater treatment (sewage) systems. Avoid spills and dispose of in accordance with applicable laws and regulations.

Aquatic Environment : No data available. According to Annex 1 to Directive 67/548/EEC, the composition materials of this product are not classified as dangerous for the environment. \*1

#### TONER-MAGENTA-OKT2M

#### 13. Disposal considerations

Waste From This Product	:	Waste material may be dumped or incinerated on condition that meets all country, state
Recommendation	:	and local environmental regulations. consult with the disposal agency and the relevant authorities; cleansing agent is water.

#### 14. Transport information

#### International Transport Information

UN Number	:	None
Hazards Class	:	None

#### 15. Regulatory information

Label Information According : None to the DIRECTIVE 1999/45/EC (EU)

Please refer to any other national measures that may be relevant.

#### **16. Other information**

#### MSDS STATUS

Documents list	: *1: •Commission Directive 2001/59/EC of 6 August 2001 adapting to technical progress
	for the 28th time Council Directive 67/548/EEC on the approximation of the laws,
	regulations and administrative provisions relating to the classification, packaging
	and labeling of dangerous substances
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	EPA, Proposed Guidelines for Carcinogen Risk Assessment (1986)
	*2: In-house data

#### SAFETY DATA SHEET

Conforms to EU Directive 91/155/EEC, as amended by 2001/58/EC

#### **TONER-CYAN-OKT2C**

#### 1. Identification of the substance/preparation and of the company/undertaking

Product name	:	TONER-CYAN-OKT2C
Code	:	43599201
Manufacturer	:	Oki Data Corporation 3-1, Futaba-cho, Takasaki-shi, GUNMA, 370-8585 JAPAN Tel. +81-27-328-6366. Fax +81-27-328-6396
Supplier	:	Oki (Europe) Ltd. 1 Oki Way, Wardpark , Cumbernauld G68 0FQ, SCOTLAND, UK Tel. +44(0) 1236 502502
Emergency telephone number	:	Tel. +44(0) 1236 502502
Emergency e-mail contact	:	MSDSQuestions@okieurope.com

#### 2. Hazards identification

Potential Health Effects		
Ingestion Effects	:	Ingestion is not applicable route of entry for intended use.
Inhalation Effects	:	Minimal respiratory tract irritation may occur with exposure to large amount
		of toner dust.
Eye Effects	:	Solid or dusts may cause irritation or scratch the surface of eye.
Skin Effects	:	Unlikely to cause skin irritation.
Environmental Hazards	:	No particular hazards known.

#### 3. Composition/information on ingredients

:

**Composition / Information** 

This product is a mixture of below substances.

#### Hazardous ingredients :

Ingredients	CAS No.	Proportion	OSHA PEL	ACGIH TLV	Other Limits
Styrene acrylate	Proprietary	80-95%	Not listed	Not listed	Not available
Wax	Proprietary	5-15%	Not listed	Not listed	Not available
Pigment	Proprietary	3-10%	Not listed	Not listed	Not available
Silica	7631-86-9	1-3%	20mppcf(*) 80(%SiO2) mg/m3	Not listed	Not available
Titanium dioxide	13463-67-7	0.1-0.9%	15mg/m3	10mg/m3	No known
		•	-	(*) million pa	rticles/cubic foot

Further Information : No known.

Ingestion	:	Dilute stomach contents with several glasses of water. Get medical attention if symptoms persist.
Inhalation	:	Move person to fresh air immediately. If symptoms occur, consult a physician.
Eye contact	:	Immediately flush with large amount of clean water for at least 15 minutes. If irritation persists, consult a physician.
Skin contact	:	Wash affected areas thoroughly with soap and water. If irritation persists, consult a physician.

#### **TONER-CYAN-OKT2C**

5. Fire-fighting mea	sure	?S
Extinguishing media	:	Water, foam, dry chemical
Special Fire-fighting Procedure	:	Keep personnel removed from and upwind of fire. Wear respiratory protection. Cool container with water spray.
Unusual Fire & Explosion Hazards	:	Toner material, like most organic material in powder form, is capable of creating a dust explosion.
6. Accidental releas	se m	easures
Spill and Leakage Procedure :	:	Wear personal protective equipment as described in Section 8. Avoid breathing dust. Minimize the release of particles. Vacuum or sweep the material into a bag or other sealed container. Dispose of waste toner in accordance with local requirements.
Environmental precautions	:	Do not discharge into drains .
7. Handling and sto	rage	
Advise on safe handling and protection against fire	:	Keep material out of reach of children. Avoid inhalation of dust and contact with eyes. Keep away from excessive heat, sparks, and open flames.
Requirements for storage rooms and advice on compatibility	:	Keep out of the reach of children. Keep container closed and store at room temperature. Keep away from strong oxidizers.

#### 8. Exposure controls/personal protection

#### Occupational Exposure Limits For Toner

ACGIH TLV	:	Particulates (Insoluble) Not Otherwise Specified 10mg/m3 (Inhalable Particulate) 3mg/m3 (Respirable Particulate)
Respiratory protection	:	Dust respiratory mask
Ventilation	:	Good general ventilation should be sufficient under intended use.
Protective Gloves	:	Use leather gloves for hand protection.
Eye protection	:	Protecting glasses
Other Protective Equipment	:	Not required under intended use.

Appearance and odor Density	:	Fine powder, blue, slight plastic odor. About 1.2g/ cm3
Boiling point	:	Not applicable
Melting point	:	Not applicable
Solubility in Water		Negligible
Solubility		Partially soluble in toluene and THF
in Other Solvent		
Percent Volatile		Not applicable
by Volume		
Flammable Limits		Not applicable
Flash Point		Not applicable
Log Po/w		Not applicable
Explosibility		No data available. According to Annex 1 to Directive 67/548/EEC,
Flammability		the composition materials of this product are not classified as explosive. *1 No data available. According to Annex 1 to Directive 67/548/EEC, the composition materials of this product are not classified as flammable. *1

#### **TONER-CYAN-OKT2C**

10. Stability and r	eactiv	vity
Stability & Reactivity	:	Stable. Hazardous polymerization will not occur.
Materials to Avoid	:	None
Hazardous decomposition	:	Combustion will produce carbon dioxide and, possibly toxic chemicals such as carbon monoxide.
11. Toxicological	inforr	nation
Acute Effects		
Oral	:	No test data available. Based on the EC labeling criteria, any components in this product are not classified as the dangerous categories of "very toxic", "toxic" and "harmful" when swallowed. *1
Dermal	:	No test data available. Based on the EC labeling criteria, any components in this product

Dermal	:	No test data available. Based on the EC labeling criteria, any components in this product are not classified as the dangerous categories of "very toxic", "toxic" and "harmful" when absorbed via the skin. *1
Inhalation	:	No test data available. Based on the EC labeling criteria, any components in this product are not classified as the dangerous categories of "very toxic", "toxic" and "harmful" when inhaled. *1
Eye Contact:	:	No test data available. Based on the EC labeling criteria, any components in this product are not classified as the dangerous categories of "irritant" when contacted with the ocular tissue. *1
Skin Contact	:	No test data available. Based on the EC labeling criteria, any components in this product are not classified as the dangerous categories of "irritant" when contacted with the skin. *1
Sensitization	:	No data available. According to Annex 1 to Directive 67/548/EEC, the composition materials of this product are not classified as a sensitizer. *1
Chronic Toxicity		
Oral	:	No test data available. Based on the EC labeling criteria, any components in this product are not required a risk phrase R48 (danger for serious damage to health by prolonged exposure). *1
Dermal	:	No test data available. Based on the EC labeling criteria, any components in this product are not required a risk phrase R48 (danger for serious damage to health by prolonged exposure). *1
Inhalation	:	No test data available. In a study in rats of 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 (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. Based on the EC labeling criteria, any components in this product are not required a risk phrase R48 (danger for serious damage to health by prolonged exposure). *1
Mutagenicity	:	Mutagenicity: This product did not cause a positive response in either the presence or absence of Aroclor-induced rat liver S9. *2
Carcinogenicity	:	No data available. IARC has issued a notice that they will publish a monograph that lists titanium dioxide (TiO2) as possibly carcinogenic to humans (Group 2B) by inhalation (based solely on animal data). Human epidemiology studies do not suggest an increased risk of cancer in humans for occupational exposure to titanium dioxide. IARC stated that exposure levels are assumed to be lower in the user industries, with the possible exception of workers who handle large quantities of titanium dioxide. *1
Reproductive Toxicity	:	No test data available. Based on the EC labeling criteria, any components in this product are not classified as the dangerous category of "toxic for reproduction". *1

#### 12. Ecological information

No data available for ecological and wastewater treatment (sewage) systems. Avoid spills and dispose of in accordance with applicable laws and regulations.

Aquatic Environment : No data available. According to Annex 1 to Directive 67/548/EEC, the composition materials of this product are not classified as dangerous for the environment. \*1

#### **TONER-CYAN-OKT2C**

#### 13. Disposal considerations

Waste From This Product	:	Waste material may be dumped or incinerated on condition that meets all country, state
Recommendation	:	and local environmental regulations. consult with the disposal agency and the relevant authorities; cleansing agent is water.

#### 14. Transport information

#### International Transport Information

UN Number	:	None
Hazards Class	:	None

#### 15. Regulatory information

Label Information According : None to the DIRECTIVE 1999/45/EC (EU)

Please refer to any other national measures that may be relevant.

#### **16. Other information**

#### MSDS STATUS

Documents list	: *1: •Commission Directive 2001/59/EC of 6 August 2001 adapting to technical progress
	for the 28th time Council Directive 67/548/EEC on the approximation of the laws,
	regulations and administrative provisions relating to the classification, packaging
	and labeling of dangerous substances
	·IARC Monographs volumes
	EPA, Proposed Guidelines for Carcinogen Risk Assessment (1986)
	*2: In-house data