

MATERIAL SAFETY DATA SHEET

1- PRODUCT AND COMPANY IDENTIFICATION

Product Supplier Reference : 252445514/252690838

Consumable Name : All In One Cartridge CTR360/ CTR365

Supplier identification :

SAGEM COMMUNICATION

27 rue Leblanc 75512

PARIS CEDEX 15 FRANCE

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DRUM COMPONENT

2.Composition/Information on Ingredients

Substance or Preparation
Preparation

Chemical Nature

Ingredients	CAS.No.	Contents(%)
Aluminium	Confidential	98.9
Binder Resin	Confidential	0.5
Charge Carrier Transport Material	Confidential	0.4
Pigment	Confidential	0.1
Under Coat Material	Confidential	0.1

3.Hazards Identification (Most Important Hazard)

Adverse Human Health Effects

Not applicable in normal use.

Carcinogenicity

This product does not contain the carcinogenic substances which are listed in NTP, IARC and are regulated by OSHA.

Environmental Effects

Not applicable in normal use.

Physical and Chemical Hazards

Not applicable in normal use.

The Classification of The Chemical Product

Not applicable

MATERIAL SAFETY DATA SHEET

Page : 2/10

Date : 01/03/2006

4. First-Aid Measures

Inhalation

Not applicable.

Skin Contact

Wash thoroughly with soap and water.

Eye Contact

Not applicable

Ingestion

Not applicable

5. Fire-Fighting Measures

Extinguishing Media

CO₂, dry chemicals, foam or water.

Specific Method

Generally by sprinkling or extinguisher.

6. Accidental Release Measures

Personal Precautions

Not applicable

Environment Precautions

Not applicable

Methods for Cleaning Up

Not applicable

7. Handling and Storage

Handling (technical measures, precautions, safe handling material)

Do not touch coated area of drum (for quality).

Storage (technical measures, storage conditions, packaging material)

Store in cool and dry place (for quality).

Do not expose to direct sunlight (for quality).

MATERIAL SAFETY DATA SHEET

Page : 3/10

Date : 01/03/2006

8.Exposure Controls/Personal Protection

Respiratory Protections
None needed.

Hand Protection
None needed.

Eye Protection
None needed.

Skin and Body Protection
None needed.

9.Physical and Chemical Properties

Physical State
Form Drum
Color Greenish-blue
Odour no odour

Information

pH	not applicable	Measuring Temp.(°C)	:-
Boiling Point(°C)	not applicable		
Flash Point(°C)	not applicable		
Explosion Properties(°C)	This product is considered a nonexplosive material under normal use condition.		
Vapor Pressure(Pa)	not applicable	Measuring Temp.(°C)	:-
Vapor Density(AIR=1)	not applicable		
Density (g/cm ³)	1.2	Measuring Temp.(°C)	:-

Solubility

Water Solubility(g/L)	insoluble
Water Solubility Measuring Temp.(°C)	:-
Other Solvent name	:-
Other Solvent Solubility(g/L)	:-
Other Solvent Solubility Measuring Temp.(°C) :-	:-

Octanol/Water Partition Coefficient
not known

10.Stability and Reactivity

Conditions to Avoid
None under normal use condition.

Materials to Avoid
None under normal use condition.

Hazardous Decomposition Products
Decomposition product will not occur

MATERIAL SAFETY DATA SHEET

Page : 4/10

Date : 01/03/2006

11.Toxicological Information

Acute Toxicity

Acute Oral Toxicity (LD50)
Mouse : 2000ng/kg or over
Acute Dermal Toxicity
: not applicable
Acute Inhalation Toxicity
: not applicable

Sensitization

Acute Skin Irritation(PII) : non-irritant
Acute Eye Irritation : not applied
Acute Allergic Effects : non-skinsensitive

Specific Effects

Carcinogenicity :
No data is available on this product.

Mutagenicity : negative(Main ingredients)
Effects on The Reproductive System : No data is available on this product.
Teratogenic : not applicable

12.Ecological Information

Persistence/Degradability : not known

Bioaccumulation
not available

Ecotoxicity

Acute Toxicity for Fish (LC50) : not available (mg/kg/96hr)
Acute Toxicity for Daphnia (EC50) : not available (mg/kg/48hr)
Algae Inhibition Test (IC50) : not available (mg/kg/72hr)

13.Disposal Consideration

Recommended Methods for Safe Environmentally Preferred Disposal

Used drum should be disposed of in an environmentally safe manner and in accordance with governmental regulations.

MATERIAL SAFETY DATA SHEET

Page : 5/10

Date : 01/03/2006

14. Transport Information

International Regulations

RID/ADR *not applicable*

DOT 49 CFR *not applicable*

ADNR *not applicable*

IMDG Code *not applicable*

ICAO-TI/IATA-DGR *not applicable*

The UN Classification Number *not applicable*

Specific Precautionary Transport Measures

Temperature -20~+50 degrees centigrade (Less than 30 days)

Humidity below 80%RH (No dewfall) (for quality).

Specific Materials to Avoid

None in normal use.

15. Regulation Information

Regulations

Not known

16. Other Information

not known

MATERIAL SAFETY DATA SHEET

TONER COMPONENT :

2. Composition / Information on Ingredients

 Substance or Preparation : [Preparation](#)

Ingredients Common Name / CAS No.	Contents (%)	EINECS / ELINCS	SYMBOL	R-PHRASE
Polyester Resin Confidential	30-70	not applicable -	not applicable	not applicable
Magnetite 1309-38-2	10-20	215-169-8 -	not applicable	not applicable
Styrene-acrylic Resin Confidential	<20	not applicable -	not applicable	not applicable
Carbon Black 1333-86-4	<5	confidential -	not applicable	not applicable
Wax 8015-86-9	<5	232-339-4 -	not applicable	not applicable
Silica 7631-86-9	<5	231-545-4 -	not applicable	not applicable

The full text of each relevant R phrase are listed at heading 16.

3. Hazards Identification

This preparation is not classified as dangerous according to Directive 1999/45/EC.

This preparation is not classified as dangerous according to Directive 76/769/EEC.

Adverse Human Health Effects : [Not applicable in normal use.](#)

Carcinogenicity : [Carbon Black was reclassified as a Group 2B by IARC in 1996 based on the result of only the inhalation study in rats. However there was not observed the incidence of tumors on the test results on dermal or oral studies. Also 2-years inhalation study using a typical toner containing carbon black showed no association between toner exposure and animal tumors.](#)

Environmental Effects : [Not applicable in normal use.](#)

Physical and Chemical Hazards : [Not applicable in normal use.](#)

MATERIAL SAFETY DATA SHEET

Page : 7/10

Date : 01/03/2006

4. First Aid Measures

Immediate medical attention is not required.

Inhalation

Gargle with water, move to place in fresh air. If unsuccessful, get medical attention.

Skin Contact

Wash thoroughly with soap and water.

Eye Contact

Immediately wash eyes with plenty of water. If unsuccessful, get medical attention.

Ingestion

Dilute stomach contents with several glasses of water. If unsuccessful, get medical attention.

5. Fire Fighting Measures

Extinguishing Media

CO₂, dry chemicals, foam or water.

Specific Method

No special fire protecting method is required.

Special Protective Equipment for Fire-Fighters

Wear full bunker gear in case of burning in large quantities.

6. Accidental Release Measures

Personal Precautions

Minimize inhalation of dust.

Environment Precautions

Keep product out of sewers and watercourses.

Methods for Cleaning Up

If spilled, sweep up or pick up by vacuum cleaner (rated for toner extraction). Remove residue with soap and water.

7. Handling and Storage

7.1 Handling (technical measures, precautions, safe handling material)

Do not handle in areas where wind blows.

Flying powder may enter eyes.

Minimize breathing dust.

7.2 Storage (technical measures, storage conditions, packaging material)

Avoid direct sunlight.

Do not keep this over 35 degrees centigrade.

Keep out of reach of children.

7.3 Specific Use(s)

The image formation of printing machine or copier.

MATERIAL SAFETY DATA SHEET

Page : 8/10

Date : 01/03/2006

8. Exposure Controls / Personal Protection

- 8.1 Exposure Limit Values : not applicable
8.2 Exposure Control
8.2.1 Occupational Exposure Control
8.2.1.1 Respiratory Protection : None required under normal conditions of use.
8.2.1.2 Hand Protection : None required under normal conditions of use.
8.2.1.3 Eye Protection : None required under normal conditions of use.
8.2.1.4 Skin and Body Protection : None required under normal conditions of use.
8.2.2 Environmental Exposure Control : No precautions should be needed under normal use.

9. Physical and Chemical Properties

9.1 General Information

- Form : Black Powder
Color : black
Odour : slightly sour smell

9.2 Important Health, Safety and Environmental Information

- pH : not applicable Measuring Concentration(%) : -
Boiling Point(°C) : not applicable
Flash Point(°C) : not applicable
Flammability : Not flammable
Explosion Properties : This product is considered a nonexplosive material under normal use condition.
Oxidising Properties : This product is considered a nonoxidizing material under normal use condition.
Evaporation Rate(Butyl acetate=1): not applicable
Vapor Pressure(Pa) : not applicable Measuring Temp.(°C) :-
Vapor Density(AIR=1) : not applicable
Density (g/cm³) : 1.45 Measuring Temp.(°C) 25
Viscosity : not applicable Measuring Temp.(°C) :-
Solubility
Water Solubility(g/L) : Insoluble Measuring Temp.(°C) :-
Other Solvent name : -
Other Solvent Solubility(g/L) : - Measuring Temp.(°C) :-

Octanol/Water Partition Coefficient: not available

9.3 Other Information

- Melting point(°C) : not applicable

10. Stability and Reactivity

- 10.1 Conditions to Avoid : Not applicable in normal use.
10.2 Materials to Avoid : None under normal use condition.
10.3 Hazardous Decomposition Products : No data are available on the adverse effect on the environment.

MATERIAL SAFETY DATA SHEET

Page : 9/10

Date : 01/03/2006

11. Toxicological Information

Acute Toxicity

Acute Oral Toxicity (LD50)

: 5000mg/kg or over (Rat) (The acute lethal oral dose to rats of JX Toner was demonstrated to be greater than 5000 mg/kg bodyweight.)

Acute Dermal Toxicity

: not available

Acute Inhalation Toxicity

: not available

Sensitization

Acute Skin Irritation (PII) : non-irritant(PII=0.0)

Acute Eye Irritation : not available

Acute Allergenic Effects : non-skinsensitive(Did not produce evidence of skin sensitisation.)

Specific Effects

Carcinogenicity : In 1996 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, 2-years cancer bioassay using a typical toner preparation containing carbon black did not demonstrate an association between toner exposure and tumor development in rats.

Mutagenicity : negative (Ames test)

Effects on The Reproductive System : not available

Teratogenic : not available

12. Ecological Information

12.1 Ecotoxicity

Acute Toxicity for Fish (LC50) : Not classified as toxic (EU Directive 1999/45/EC) (mg/l/96hr)

Acute Toxicity for Daphnia (EC50) : Not classified as toxic (EU Directive 1999/45/EC) (mg/l/48hr)

Algae Inhibition Test (IC50) : Not classified as toxic (EU Directive 1999/45/EC) (mg/l/72hr)

12.2 Mobility

: No data are available on the adverse effect on the environment.

12.3 Persistence / Degradability

: not available

12.4 Bioaccumulation Potential

: not available

12.5 Other Adverse Effects

: not available

13. Disposal Consideration

Recommended Methods for Safe Environmentally Preferred Disposal:

Used toner should be disposed of in an environmentally appropriate manner and in accordance with governmental regulations. Do not incinerate.

MATERIAL SAFETY DATA SHEET

Page : 10/10

Date : 01/03/2006

14. Transport Information

International Regulations

RID/ADR	not applicable
DOT 49 CFR	not applicable
ADNR	not applicable
IMDG Code	not applicable
ICAO-TI/IATA-DGR	not applicable
The UN Classification Number	not applicable

Specific Precautionary Transport Measures :

Avoid direct sunlight. Do not keep this over 35 degrees centigrade.

Specific Materials to Avoid :

None in normal use.

15. Regulatory Information

Regulations

This preparation is not classified as dangerous according to Directive 1999/45/EC.
This preparation is not classified as dangerous according to Directive 76/769/EEC.

Other regulation

Not known

16. Other Information

References:

- 1) IARC(1996) "IARC Monograph on the Evaluation of the Carcinogenic Risk of Chemicals to Humans, Vol.65, Printing Process and Printing Inks, Carbon Black and Some Nitro Compounds", Lyon, pp149-261
 - 2) H. Muhle, B. Bellman, 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, pp280-299
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