DATE PREPARED: May. 19, 2010

## SAFETY DATA SHEET (1/5)

According to EC Regulation 1907/2006/EC, Article 31

SDS No. X01009 PRODUCT NAME: RX-01

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

PRODUCT NAME: RX-01 used in PFA731 & PFA741

USE OF THE SUBSTANCE / PREPARATION : Toner for electrophotographic apparatus

MANUFACTURE'S NAME

Sagemcom Austria GmbH Gutheil-Schoder-Gasse 17 1230 Vienna

Austria

For information: tel. +43 1 66155 For emergency: tel. +43 1 66155

### 2. HAZARD IDENTIFICATION

### EMERGENCY OVERVIEW

Odorless black fine powder.

It is not a highly flammable. If suspended in air, it is combustible as most organic powders.

CARCINOGENIC EFFECTS: Carbon black is reclassified as a group 2B by IARC,

but inhalation test used typical toner showed no association between toner exposure and animal tumors.

INDICATION OF DANGER: The preparation is not dangerous in the sense of guideline 1999/45/EC.

POTENTIAL HEALTH EFFECTS

EYES: May cause slight irritation or corneal injury.

SKIN CONTACT: May be not irritating to skin.
INGESTION: Low acute toxicity with ingestion.

INHALATION: Exposure to amounts of dust may cause physical irritation to respiratory tract.

POTENTIAL ENVIRONMENTAL EFFECTS: No special environmental precaution required.

FIRE AND EXPLOSION

SENSITIVITY TO MECHANICAL IMPACT: None SENSITIVITY TO STATIC CHARGE: None

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

		Proportion				
Ingredients	CAS No.	EC No.	(% by wt.)	OSHA PEL	ACGIH TLV	<u>Other</u>
						<u>Limits</u>
Polyester resin	Trade Secret	Polymer	> 88.0	Not listed	Not listed	None
		Exception				
Carbon black*	1333-86-4	215-609-9	< 5.0	$3.5  \mathrm{mg/m}^3$	$3.5 \text{mg/m}^3$	None
Iron oxide	1317-61-9	215-277-5	< 2.0	Not listed	Not listed	None
Polypropylene	9010-79-1	_	< 2.0	Not listed	Not listed	None
Styrene-acrylate	Trade Secret	Polymer	< 2.0	Not listed	Not listed	None
Copolymer		Exception				
Amorphous silica	Trade Secret	Trade Secret	< 1.0	20mppcf	$10.\mathrm{0mg/m}^3$	None

\* : See [section 16]

DATE PREPARED : May. 19, 2010

# SAFETY DATA SHEET (2/5)

According to EC Regulation 1907/2006/EC, Article 31

SDS No. X01009 PRODUCT NAME: RX-01

### 4. FIRST AID MEASURES

EYES: Flush eyes immediately with plenty of water within 15 minutes.

If irritation persists, obtain medical advice.

SKIN: Wash with plenty of water and soap.

INGESTION: Rinse mouth and give several glasses of water. If irritation persists,

obtain medical advice.

INHALATION: Move to fresh air. If irritation persists, obtain medical advice.

NOTE TO PHYSICIAN: None.

#### 5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES

FLASH POINT: No data available

FLAMMABLE LIMITS

LEL:No data available UEL:No data available

EXTINGUISHING MEDIA: CO<sub>2</sub>, dry chemical, water.

UNSUITABLE EXTINGUISHING MEDIA: Do not use a solid water stream as it may scatter and spread fire.

HAZARDOUS COMBUSTION PRODUCTS: CO2, CO, Organic products of decomposition.

FIRE-FIGHTING EQUIPMENT: Wear full bunker gear including a positive pressure self-

contained breathing apparatus in case of burning in large quantities.

### 6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS: Minimize the release of particulates. Wear personal protective equipment.

Garments may be washed or dry cleaned, after removal of loose toner.

ENVIRONMENT PRECAUTION: Do not allow this preparation to contaminate ground water system.

METHOD FOR CLEANING UP: After spraying with water to prevent development of dusts, spills should

be swept up or wiped up. Residuals can be removed with soap and water. Or sweep slowly spilled powder to paper and transfer into a suitable container for disposal. If sweep them with vacuum cleaner, must use a dust

explosion-proof type.

## 7. HANDLING AND STORAGE

HANDLING: Avoid creating dust. Clean up all spills promptly. Inhalation and contact with skin

or eyes should be avoided. Provide general ventilation. You should use or handle at

the suitable place without smudges.

STORAGE: Archiving environment is ventilated well. In a cool and dry place, away from flames

and spark-producing equipment.

DATE PREPARED : May. 19, 2010

## SAFETY DATA SHEET (3/5)

According to EC Regulation 1907/2006/EC, Article 31

SDS No. X01009 PRODUCT NAME: RX-01

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limit values:

The table blow is a summary. Please see the specific legislation for complete information. Control parameters (as inhalant dust)

Austria: 10mg/m³, TWA 20mg/m³, STEL

Belgium: 10mg/m³, TWA

Denmark: 10mg/m³, TWA 20mg/m³, STEL

France: 10mg/m<sup>3</sup>, TWA

Germany(AGS\*): 10mg/m³, TWA 20mg/m³, STEL

 Germany (DFG\*):
 4mg/m³, TWA

 Hungary:
 10mg/m³, TWA

 Spain:
 10mg/m³, TWA

 Sweden:
 10mg/m³, TWA

 USA (OSHA):
 15mg/m³, TWA

\*Note- Germany (AGS) :15minutes average values, insoluble particulates Germany (DFG) :long term exposure level, insoluble particulates

TWA : Time Weighted Average STEL : Short Term Exposure Limit

Engineering Controls: Ensure adequate ventilation to maintain below occupational limits.

No precautions should be needed under normal use.

Personal Protection Equipment

EYE PROTECTION:

RESPIRATORY PROTECTION: In dusty atmospheres, use an approved dust respirator. SKIN PROTECTION: No precautions should be needed under normal use.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Black fine powder.

ODOR: Odorless

BOILING POINT ( $^{\circ}$ ): N. A. (not applicable)

VAP PRESS: N. A. VAP DENSITY: N. A.

SOL IN WATER: Negligible SP. GRAVITY: ca. 1.20 MELTING POINT: No data. No data. pH: N. A % VOLATILE: FLASH POINT ( $^{\circ}$ C): No data. FLAMMABLE (EXPLOSIVE) LIMITS: No data. AUTOIGNITION TEMPERATURE ( $^{\circ}$ C): No data. No data. FLAMMABILITY: OXIDIZING PROPERTIES: No data.

## 10. STABILITY AND REACTIVITY

STABILITY: This is a stable product.

INCOMPATIBILITY: (SPECIAL MATERIALS TO AVOID) Oxidizing materials. HAZARDOUS DECOMPOSITION PRODUCTS: Carbon oxides, hydrocarbons (by high heat and fire)

HAZARDOUS POLYMERIZATION: Will not occur.

DATE PREPARED : May. 19, 2010

## SAFETY DATA SHEET (4/5)

According to EC Regulation 1907/2006/EC, Article 31

SDS No. X01009 PRODUCT NAME: RX-01

### 11. TOXICOLOGICAL INFORMATION

MUTAGENIC EFFECTS: None

# CARCINOGENIC EFFECTS:

In 1996, the IARC revaluated 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 developer of lung tumors in rat receiving chronic inhalation exposures to free carbon black at level 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.

In a study in rats (H.Muhle) by chronic inhalation exposure to a typical toner, a mild to moderate degree of lung fibrosis was observed in 92% of the rats in the concentration( $16\,\text{mg/m}^3$ ) exposure group, and a minimal to mild degree of fibrosis was noted in 22% of the animals in the middle ( $4\,\text{mg/m}^3$ ) exposure group. But no pulmonary changes was reported in the lowest ( $1\,\text{mg/m}^3$ ) exposure group, the most relevant level to potential human exposures.

## CHRONIC EFFECTS:

In a study in rats (H.Muhle) by chronic inhalation exposure to a typical toner, a mild to moderate degree of lung fibrosis was observed in 92% of the rats in the concentration( $16\text{mg/m}^3$ ) exposure group, and a minimal to mild degree of fibrosis was noted in 22% of the animals in the middle ( $4\text{mg/m}^3$ ) exposure group. But no pulmonary changes was reported in the lowest ( $1\text{mg/m}^3$ ) exposure group, the most relevant level to potential human exposures.

## 12. ECOLOGICAL INFORMATION

None

### 13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: (Review Section 6,7) Waste must be disposed of in accordance with country and local environmental control regulations.

# 14. TRANSPORT INFORMATION

TRANSPORT INFORMATION: This is not a hazardous product

UN No.:

None allocated
UN Shipping Name:

None allocated
UN Classification:

None allocated
UN Packing Group:

None allocated

DATE PREPARED : May. 19, 2010

## SAFETY DATA SHEET (5/5)

According to EC Regulation 1907/2006/EC, Article 31

SDS No. X01009 PRODUCT NAME: RX-01

### 15. REGULATORY INFORMATION

<USA Information>

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

⟨EU Information⟩

Classification:

Symbol and Indication: Not required R-phrase: Not required S-phrase: Not required

Dangerous Component: None

1999/45/EEC ANNEX V: Not required

## 16. OTHER INFORMATION

NFPA Rating: Health = 1 Flammability = 1 Reactivity = 0

### \*REFERENCES:

IARC (1996) IARC Monographs 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, pp. 149-261.

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, pp280-299.

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. It dose not represent a guarantee for the properties of the product described in terms of the legal warranty.