

Toner, Savin 9027/9035

# RICOH MATERIAL SAFETY DATA SHEET

Date Prepared : 1/20/2001

MSDS Number : 887719

Savin Toner for 9027 / 9035

Product Number: 7356

## SECTION 1 CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

### Product Identification

Product Name : Savin Toner for 9027 / 9035  
Product Number : 7356  
Chemical Name : Mixture  
CAS Number : 0-00-0

### Company Identification

Company Name : Ricoh Corporation  
Address : 5 Dedrick Place  
West Caldwell, NJ USA  
Emergency telephone Number : (800)336-MSDS (6737)  
Telephone Number for Information : (973)882-5218

## SECTION 2 COMPOSITION, INFORMATION ON INGREDIENTS

Ingredients	CAS #	Contents %	ACGIH (TLV)			OSHA (PEL)	
			TWA	STEL	C	TWA	C
Polyester Resin	Confidential	50-80	N/A	N/A	N/A	N/A	N/A
Styrene Acrylic Polymer	25767-47-9	10-40	N/A	N/A	N/A	N/A	N/A
Carbon Black	1333-86-4	<15	3.5mg/m3	N/A	N/A	3.5mg/m3	N/A
Carnauba Wax	8015-86-9	<5	N/A	N/A	N/A	N/A	N/A

## SECTION 3 HAZARDS IDENTIFICATION

Emergency Overview					
HMIS	Health = 1	Flammability = 1	Reactivity = 0	PPE	See Section 8

### Potential Health Effects

Primary Entry Routes Inhalation : Yes

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Skin : No

Ingestion : No

**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 that 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.

**Medical Conditions Aggravated by Exposure :** Not Applicable

**Chronic Effects :**

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 lung for a prolonged interval. Use of this product, as intended, does not result in inhalation of excessive dust.

**SECTION 4 FIRST AID MEASURES**

**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 :** Try to remove with eye drops or flush with water. If unsuccessful, get medical attention.  
**Ingestion :** Dilute stomach contents with several glasses of water. If unsuccessful, get medical attention.

**SECTION 5 FIRE-FIGHTING MEASURES**

**Flash Point** Not available  
**Burning Rate (mm/sec)** Not available  
**Autoignition Temperature (C)** Not available  
**Flammable Limits (%)** LEL Not applicable  
 UEL Not applicable

**Extinguishing Media :** Foam, water spray ( mist ), dry chemical or carbon dioxide may be suitable.  
**Fire-Fighting Instructions :** No special fire protecting method is required.

**SECTION 6 ACCIDENTAL RELEASE MEASURES**

**Personal Precautions :** Minimize inhalation of dust.  
**Environment Precautions :** Keep product out of sewers and watercourses.  
**Method for Cleaning up :** If spilled, sweep up or pick up by vacuum cleaner(rated for developer extraction).

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Remove residue with soap and water.

**SECTION 7 HANDLING AND STORAGE****Handling (technical measures, precautions, safe handling material)**

Do not handle in areas where wind blows.

Flying powder may enter eyes.

Minimize breathing dust.

**Storage (technical measures, storage condition, packaging material)**

Avoid direct sunlight.

Do not keep this over 35C (95F)

Keep out of reach children.

**SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION**

Ventilation	Local exhaust equipment is needed.
Respiratory Protections (Specify type)	None required under normal conditions of use.
Eye Protection :	None required under normal conditions of use.
Protective Gloves	None required under normal conditions of use.
Protective Clothing or Equipment	None required under normal conditions of use.

**SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES**

Form	Powder
Color	Black
Odor	Slightly plastic odor
pH	Not applicable
Boiling Point (C)	Not applicable
Vapor Pressure(Pa)	Not applicable
Vapor density(Air=1)	Not applicable
Density (g/cm <sup>3</sup> )	1.2 approximately
Formula Weight	Not applicable
Melting Point (C)	Not applicable
Viscosity (Pa)	Not applicable
Volatile (%)	-
Evaporation Rate(n-BuAc=1)	Not applicable

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Water Solubility (g/L) Insoluble  
 Other Solvent name -  
 Other Solvent Solubility(g/L) -

**SECTION 10 STABILITY AND REACTIVITY**

Stability Stable  
 Condition to Avoid Not applicable in normal use.  
 Material to Avoid Not applicable in normal use.  
 Hazardous Polymerization None  
 Hazardous Decomposition or Byproducts Will not occur

**SECTION 11 TOXICOLOGICAL INFORMATION**

Acute Toxicity Acute Oral Toxicity : Rat :  $\geq 5000$  mg/kg  
 Acute Dermal Toxicity : Not available  
 Acute Inhalation Toxicity : Not available

Sensitization Acute Skin Irritation : Non-irritant  
 Acute Eye Irritation : Not applied  
 Acute Allergenic Effects : 0%

**Special 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  
 Effects on the reproductive system No data is available on this product.  
 Teratogenic No data

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**SECTION 12 ECOLOGICAL INFORMATION**

Persistence/Degradability	Not known
Bioaccumulation	Not known in bioaccumulation
Ecotoxicity	Acute toxicity for Fish
	Acute toxicity for daphnia
	Algae inhibition test
	Not available
	Not available
	Not available

**SECTION 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.

**SECTION 14 TRANSPORT INFORMATION****International regulations**

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

Specific Precautionary Transport Measures	Avoid direct sunlight. Do not keep this over 35C (95F)
Specific Materials to Avoid	None in normal use.

**SECTION 15 REGULATION INFORMATION**

Regulation : Not known

**SECTION 16 OTHER INFORMATION**

Explanation of Hazardous Materials Identification System (HMIS) & National Fire Protection Association (NFPA) hazard rating systems  
Both the HMIS and NFPA systems use number from "0" to "4" to show the degree of hazard in an uncontrolled situation:

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0=Minimum hazard 1=Slight hazard 2=Moderate hazard 3=Serious hazard 4=Severe hazard.

Colors may also be used in both systems

Blue= Health hazard Red= Fire hazard Yellow= Reactivity hazard White= Indicate a special hazard.

HMIS will specify any Personal Protective Equipment required (PPE).

NFPA will specify OX(oxidizer), Acid(acid), ALK(alkali), COR(corrosive), W(use no water), xx(radioactive).

**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