



Material Safety Data Sheet (ANSI form)

Date Prepared 2006/04/18

Section1 : Chemical Product and Company Identification

Product Name DEVELOPER(G-C) Reflex Blue
 Company Name : Ricoh Printing Systems America, Inc.
 Address : 2635-A Park Center Drive, Simi Valley, CA, 93065
 Telephone Number : 805-578-4000
 Telefax Number : 805-578-4005

Section2 : Composition, Information on Ingredients

Ingredients CAS No. /Common Name	Contents (%)	ACGIH (TLV)			OSHA (PEL)	
		TWA	STEL	C	TWA	C
Confidential MAGNETITE CARRIER 1333-86-4	>90	not available	not available	not available	not available	not available
CARBON BLACK	<1	3.5mg/m3	not available	not available	3.5mg/m3	not available
Confidential POLYESTER RESIN 5280-68-2	<10	not available	not available	not available	not available	not available
ORGANIC PIGMENT 81-77-6	<1	not available	not available	not available	not available	not available
ORGANIC PIGMENT	<1	not available	not available	not available	not available	not available

Section3 : Hazards Identification

☆☆☆☆☆ Emergency Overview ☆☆☆☆☆

HMIS Health:1 Flammability:1 Reactivity:0 PPE:See section 8

Potential Health Effects

Primary Entry Routes:

Inhalation :No
Skin :No
Ingestion :

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.

Medical Conditions Aggravated by Exposure:

not available

Chronic Effects

No data is available on this product.

Section4 : 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

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.

Section5 : Fire Fighting Measures

Flash Point (°C)

not available

Burning Rate (mm/sec)

not available

Autoignition Temperature (°C)

not available

Flammable Limits (%)

LEL not available

UEL not available

Extinguishing Media

CO2, dry chemicals, foam or water.

Fire-Fighting Instructions

Generally by sprinkling or extinguisher.

Section6 : 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. Remove residue with soap and water.

Section7 : Handling and Storage

Handling

Do not handle in areas where wind blows. Flying powder may enter eyes. Minimize inhalation of dust.

Minimize breathing dust.

Minimize skin contact.

Storage

Store in a cool, dry place.

Keep out of reach of children.

Section8 : Exposure Controls/Personal Protection

Ventilation

None needed under normal use condition.

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.

Section9 : Physical and Chemical Properties

Form : Powder

Color : REFLEX BLUE

Odor : No odor

pH	: not available	Measuring Temp. (°C)	: -
Boiling Point (°C)	: not available		
Vapor Pressure (Pa)	: not applicable	Measuring Temp. (°C)	: -
Vapor Density (AIR=1)	: not available		
Density (g/cm ³)	: not available	Measuring Temp. (°C)	: -
Formula Weight	: not applicable		
Melting Point (°C)	: not available		
Viscosity (mPa·s)	: not applicable	Measuring Temp. (°C)	: -
Volatile (%)	: -		
Evaporation Rate	: not available		
(Butyl Acetate = 1)			
Water Solubility (g/L)	: Insoluble	Measuring Temp. (°C)	: -
Other Solvent name	: not available		
Other Solvent Solubility (g/L)	: -	Measuring Temp. (°C)	: -

Section10 : Stability and Reactivity

Condition to Avoid

Not applicable in normal use.

Materials to Avoid

Not applicable in normal use.

Hazardous Polymerization : None

Hazardous Decomposition or Byproducts

will not occur

Section11 : Toxicological Information

Acute Toxicity

Acute Oral Toxicity

: 5000mg/kg or over (Rat) (Estimate from test result of ingredients.)

Acute Dermal Toxicity

: not available

Acute Inhalation Toxicity

: not available

Sensitization

Local Effects

Acute Eye Irritation : not available (None of ingredients is listed on hazardous characteristics list of EU.)

Acute Allergenic Effects : non-skinsensitive (Estimate from test result of ingredients.)

Sensitization

Acute Skin Irritation(PII) : 1.0 or below (Estimate from test result of ingredients.)

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 (Estimate from Ames test result of ingredients.)

Effects on The Reproductive System : None of ingredients is substance on hazardous characteristics list of reproductive toxicity.

Teratogenic : Not available.

Section12 : Ecological Information

Persistence/Degradability : not known

Bioaccumulation

not available

Ecotoxicity

Acute Toxicity for Fish (LC50) :not available (mg/l/96hr)

Acute Toxicity for Daphnia (EC50) :not available (mg/l/48hr)

Algae Inhibition (IC50) :not available (mg/l/72hr)

Section13 : Disposal Consideration

Recommended Methods for Safe Environmentally Preferred Disposal

[Used product should be disposed of in an environmentally appropriate manner.](#)

Section14 : Transport Information

International Regulations

DOT 49 CFR : [not applicable](#)

IMDG Code : [not applicable](#)

Air Transport

ICAO-TI/IATA-DGR : [not applicable](#)

The UN Classification Number : [not applicable](#)

Specific Precautionary Transport Measures

[Avoid direct sunlight.](#)

Specific Materials to Avoid

[None in normal use.](#)

Section15 : Regulation Information

Regulations

[Not known](#)

Section16 : 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:

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).

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