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Creation Date : September 8, 2004

Revision Date : February 24, 2006

# Safety data sheet for chemical products

## 1. PRODUCT AND COMPANY IDENTIFICATION

Product name: **SX-217 Black [JETSTREAM]**

Creation Date : September 8, 2004  
 Revision Date : February 24, 2006  
 File No. : 061253A Rev. 2.5.01.02

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

The chemical product is a substance or a preparation : Preparation

Chemical nature: Component parts : Ink \*

| Chemical or generic name       | CAS No.    | TSCA       | EINECSNo.  | Concentration range (wt%) |
|--------------------------------|------------|------------|------------|---------------------------|
| 1-Butanol, 3-methoxy-3-methyl- | 56539-66-3 | Registered | 2602524    | 30- 50                    |
| Resins                         | Registered | Registered | Polymer    | 10- 30                    |
| Coloring agents                | Registered | Registered | Registered | 10- 30                    |
| Carbon Black                   | 1333-86-4  | Registered | 2156009    | < 10                      |
| Ethanol, 2-(2-butoxyethoxy)-   | 112-34-5   | Registered | 2039616    | < 10                      |
| Polypropylene glycol           | 25322-69-4 | Registered | 5000398    | < 10                      |
| 2-Phenoxyethanol               | 122-99-6   | Registered | 2045897    | < 10                      |
| Additive                       | Registered | Registered | Polymer    | < 10                      |

Other parts : Other parts are excluded from 'chemical substances'.

## 3. HAZARDS IDENTIFICATION

Most important hazards : Not available.

Specific hazards : Information of components.

<Carbon Black>

MAJOR HEALTH HAZARDS: suspect cancer hazard (in animals)

PHYSICAL HAZARDS: Dust/air mixtures may ignite or explode.

## 4. FIRST-AID MEASURES

Inhalation:

Not applicable.

(Due to its low vapor pressure. Inhalation is unlikely at room temperature.)

Skin contact:

Wash skin with soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention, if needed. Thoroughly clean and dry contaminated clothing and shoes before reuse.

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**Eye contact:**

Flush eyes with plenty of water for at least 15 minutes. Then get immediate medical attention.

**Ingestion:**

If swallowed, seek medical advice, and show the MSDS to the physician then.

[Ink quantity of refill(SXR-C7) : about 300mg]

**5. FIRE-FIGHTING MEASURES**

Fire and explosion measures : Slight fire hazard.

**Extinguishing media:**

- Suitable : regular dry chemical, carbon dioxide, water, regular foam.  
 Large fires : Use regular foam or flood with fine water spray.  
 Fire fighting : Move container from fire area if it can be done without risk.  
                   : Use extinguishing agents appropriate for surrounding fire.  
                   : Avoid inhalation of material or combustion by-products.  
                   : Stay upwind and keep out of low areas.

**6. ACCIDENTAL RELEASE MEASURES**

- Personal precautions : Not available.  
 Environmental precautions : Do not wash away into shower or water way.  
 Methods for cleaning up : Take / Soak up with absorbent.  
                                   : In accordance with national, state and local regulations.

**7. HANDLING AND STORAGE**

Store and handle in accordance with all current regulations and standards.

Keep separated from incompatible substances.

**Handling:**

- Technical measures : Don't swallow ink.  
                           : Recap after use.  
                           : Don't shake.  
                           : Keep out of the reach of children.  
                           : Avoid contact with skin and eyes.

Precautions : Not available.

Safe handling advice : Not available.

**Storage:**

- Technical measures : Keep away from oxidizing materials, ignition sources and  
                           high temperature.  
 Storage condition : Avoid direct sunlight.  
                           : Do not leave the products in high temperature space.  
                           : Recommended temperature: 0-30 C.

Incompatible products : (Information of components.)

- |  |                                   |
|--|-----------------------------------|
| oxidizing materials, organic peroxides | 1-Butanol, 3-methoxy-3-methyl-    |
| oxidizing materials                    | Resin / Polypropylene glycol / 2- |
| strong oxidizers                       | Coloring agent                    |
| oxidizing materials, halogens          | Carbon Black                      |
| acids, bases, oxidizing materials      | Ethanol, 2-(2-butoxyethoxy)-      |

Packaging materials : Not applicable.

## 8. EXPOSURE CONTROL / PERSONAL PROTECTION

Engineering measures : Not required.

Control parameters (Information of components.)

|       |   |  |
|-------|---|--|
| OSHA  | 3.5mg/m <sup>3</sup>  | Carbon Black                             |
| ACGIH | 10mg/m <sup>3</sup> (Nuisance particulate)<br>3.6mg/m <sup>3</sup> (total dust) TWA | Resin<br>Carbon Black                    |
| EC    | 3.5mg/m <sup>3</sup>  | Carbon Black                             |
| DFG   | 100 mg/m <sup>3</sup> MAK(peak limitation category I, with excursion factor of 1)   | Ethanol, 2-(2-butoxyethoxy)-             |
| AIHA  | 10mg/m <sup>3</sup> TWA (aerosol)<br>25ppm TWA (skin) [DOW CHEMICAL]                | Polypropylene glycol<br>2-Phenoxyethanol |

Personal protective equipment : Not required.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

[ ] : Information of components.

|                          |  |
|--------------------------|--|
| Physical state and form  | : High viscous liquid.   |
| Colour                   | : Black.   |
| Odour                    | : None odour.  |
| pH                       | : Not applicable.  |
| Boiling point            | : Not available. [1-Butanol, 3-methoxy-3-methyl-/ 174 C]   |
| Melting point            | : <-20 C   |
| Flash point              | : Not applicable. [1-Butanol, 3-methoxy-3-methyl-/ 68 C]   |
| Autoignition temperature | : Not applicable. [Polypropylene glycol/ 201 C]  |
| Explosion limits         | : Not applicable.<br>[ Lower flammable limit / 1.2% , Upper flammable limit / 13.1% <1-Butanol, 3-methoxy-3-methyl-> ] |
| Density                  | : about 1.1 / 25 C   |
| Vapour density (air=1)   | : Not available. [1-Butanol, 3-methoxy-3-methyl-/ 4.1]   |
| Solubility in water      | : Soluble.   |
| Evaporation rate         | : Not available.   |
| Volatile                 | : 55-58%   |

## 10. STABILITY AND REACTIVITY

|  |   |
|--|---|
| Stability                              | : Stability.  |
| Hazardous reactions                    | : Will not occur.   |
| Conditions to avoid                    | : Avoid heat, flames, sparks and other sources of ignition.<br>Avoid contact with incompatible materials. |
| Materials to avoid                     | : (Information of components.)  |
| oxidizing materials, organic peroxides | 1-Butanol, 3-methoxy-3-methyl-  |
| oxidizing materials                    | Resin / Polypropylene glycol / 2-Phenoxyethanol   |
| strong oxidizers                       | Coloring agent  |
| oxidizing materials, halogens          | Carbon Black  |
| acids, bases, oxidizing materials      | Ethanol, 2-(2-butoxyethoxy)-  |
| Hazardous decomposition products       | : (Information of components.)  |
| oxides of carbon, water                | common decomposition products   |
| toxic and/or hazardous gases,          | Resin   |
| miscellaneous decomposition products.  |   |
| oxides of nitrogen.                    | Coloring agent  |

## 11. TOXICOLOGICAL INFORMATION

(Information of components)

### Acute toxicity

|                |  |   |
|----------------|--|---|
| Ingestion LD50 | 4300mg/kg-Rat<br>>3000mg/kg-Rat<br>>=300 < 500 mg/kg-Rat,<br>3900mg/kg-Rat<br>>8000mg/kg-Rat<br>2200mg/kg-Rabbit<br>57000mg/kg-Rat<br>933mg/kg-Mouse | 1-Butanol, 3-methoxy-3-methyl-<br>Resin<br>Coloring agent<br><br>Carbon Black<br>Ethanol, 2-(2-butoxyethoxy)-<br>Polypropylene glycol<br>2-Phenoxyethanol |
|----------------|--|---|

|                 |                |  |
|-----------------|----------------|--|
| Inhalation LC50 | Not available. |  |
|-----------------|----------------|--|

|           |   |  |
|-----------|---|--|
| Skin LD50 | >2000mg/kg<br>4120mg/kg-Rat<br>5000mg/kg-Rabbit | 1-Butanol, 3-methoxy-3-methyl-<br>Ethanol, 2-(2-butoxyethoxy)-<br>2-Phenoxyethanol |
|-----------|---|--|

### Local effects

|  |   |
|--|---|
| Irritant:eye<br>Irritant:inhalation, skin<br>Irritant:inhalation, skin, eye<br>Irritant:inhalation, skin,<br>Corrosive:eye | Resin<br>Carbon Black<br>Ethanol, 2-(2-butoxyethoxy)-<br>2-Phenoxyethanol |
|--|---|

### Chronic toxicity and long term toxicity

|  |  |
|--|--|
| Respiratory disorders.<br>The liquid defats the skin. The substance may have effects on<br>the blood.<br>The liquid defats the skin. The substance may have effects on<br>the central nervous system, resulting in impaired functions. | Carbon Black<br>Ethanol, 2-(2-butoxyethoxy)-<br><br>2-Phenoxyethanol |
|--|--|

### Signs and Symptoms of overexposure and aggravated by exposure

|              |  |  |
|--------------|--|--|
| Inhalation   | irritation<br>irritation,headache<br>irritation,sore throat            | Resin / Carbon Black<br>Ethanol, 2-(2-butoxyethoxy)-<br>2-Phenoxyethanol   |
| Skin contact | inflammation<br>irritation<br><br>irritation,redness                   | 1-Butanol, 3-methoxy-3-methyl-<br>Resin / Coloring agent /<br>Carbon Black / Polypropylene<br>Ethanol, 2-(2-butoxyethoxy)- /<br>2-Phenoxyethanol         |
| Eye contact  | irritation<br><br>mechanical<br>irritation,redness<br>irritation,burns | 1-Butanol, 3-methoxy-3-methyl- /<br>Resin / Coloring agent /<br>Polypropylene glycol<br>Carbon Black<br>Ethanol, 2-(2-butoxyethoxy)-<br>2-Phenoxyethanol |
| Ingestion    | nausea,vomiting<br><br>sore throat,nausea                              | Ethanol, 2-(2-butoxyethoxy)- /<br>Polypropylene glycol<br>2-Phenoxyethanol   |

### Specific effects

|               |              |
|---------------|--------------|
| IARC Group 2B | Carbon Black |
|---------------|--------------|

## 12. ECOLOGICAL INFORMATION

Not available.

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### 13. DISPOSAL CONSIDERATIONS

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Waste from residues : Disposal in accordance with all current regulations and standards.

Contaminated packaging : Not applicable.

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### 14. TRANSPORT INFORMATION

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HS Code : 960810

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### 15. REGULATORY INFORMATION

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#### Regulations (Information of components)

Hazardous chemicals (OSHA HCS) : Carbon Black

#### EU labeling

20% <= Xi:R36 : Ethanol, 2-(2-butoxyethoxy)-

25% <= Xn:R22, 20% <= Xi:R36 : 2-Phenoxyethanol

R22 : Harmful if swallowed.

R36 : Irritating to eyes.

#### CANADA Hazardous Products Act - Ingredient Disclosure List

1% over : Carbon Black / Ethanol, 2-(2-butoxyethoxy)- / 2-Phenoxyethanol

#### Hazard and safety information

Products are manufactured in accordance with European regulation EN71 part 3

Products are manufactured in accordance with ELV directive of EU.

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### 16. OTHER INFORMATION

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This sheet completes the technical sheet of use but it doesn't replace it.

The information contained in this sheet are based knowledge of the products at the data : (February 24, 2006). They are given quite sincerely.

Moreover the attention of the users is drawn on the risks possibly taken, when a product is used for other utilization than these which it is intended.