

Safety data sheet for chemical products

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: SX-210 Black [JETSTREAM]

Manufacture's name : MITSUBISHI PENCIL CO.,LTD.

Address : 5-23-37, HIGASHIOHI, SHINAGAWA, TOKYO, JAPAN

Telephone number : 03-3458-6281 Telefax number : 03-3450-0363

Creation Date : April 6, 2004

Revision Date : June 11, 2012

File No. : 061238A Rev. 2.5.01.05

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%)
Glycol ether	Registered	Registered	Registered	50- 80
Additives	Registered	Registered	Registered	10- 30
Coloring agents	Registered	Registered	Registered	10- 30
Carbon Black	1333-86-4	Registered	2156099	< 10
Resins	Registered	Registered	Polymer	< 10
Polypropylene glycol	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.

<Additive>

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

<Coloring agent>

MAJOR HEALTH HAZARDS: harmful if swallowed, eye irritation

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

<Carbon Black>

MAJOR HEALTH HAZARDS: suspect cancer hazard (in animals)

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

<Resin>

MAJOR HEALTH HAZARDS: eye irritation

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.

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 product : 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.
: 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 Glycol ether
oxidizing materials, strong oxidizers Additive
oxidizing materials Coloring agent / Resin / Polypropylene glycol
oxidizing materials, halogens Carbon Black
- Packaging materials : Not applicable.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

Engineering measures : Not required.

Control parameters (Information of components.)

OSHA	3.5mg/m ³ TWA	Carbon Black
ACGIH	3.5mg/m ³ TWA	Carbon Black
	10mg/m ³ TWA	Resin
EC	3.5mg/m ³ TWA	Carbon Black

Personal protective equipment : Not required.

9. PHYSICAL AND CHEMICAL PROPERTIES

[] : Information of components.

- Physical state : Liquid.
- Color : Black.
- Odor : None odor.
- pH : Not applicable.
- Boiling point : Not available. [Glycol ether/ 174 C]
- Melting point : <-20 C
- Flash point : Not available. [Glycol ether/ 68 C]
- Autoignition temperature : Not available. [Polypropylene glycol/ 201 C]
- Explosion limits : Not applicable.
[Lower flammable limit / 1.2% , Upper flammable limit / 13.1% <Glycol ether>]
- Density : Not available.
- Vapor density (air=1) : Not available. [Glycol ether/ 4.1]
- Solubility in water : Not available.
- Evaporation rate : Not available.
- Volatile : 52-55%

10. STABILITY AND REACTIVITY

Stability : Stability.

Hazardous reactions : Will not occur.

Conditions to avoid : Avoid heat, flames, sparks and other sources of ignition.
Avoid contact with incompatible materials.

Materials to avoid : (Information of components.)

oxidizing materials, organic peroxides	Glycol ether
oxidizing materials, strong oxidizers	Additive
oxidizing materials	Coloring agent / Resin / Polypropylene glycol
oxidizing materials, halogens	Carbon Black

Hazardous decomposition products : (Information of components.)

oxides of carbon, water	common decomposition products
miscellaneous decomposition products.	Additive / Resin
oxides of nitrogen, carbon, halogenated compounds. miscellaneous decomposition products.	Coloring agent
carbon monoxide, carbon dioxide, organic products of decomposition, sulphoxides.	Carbon Black

11. TOXICOLOGICAL INFORMATION

(Information of components)

Acute toxicity

Ingestion LD50	4300mg/kg-Rat	Glycol ether
	413mg/kg-Rat	Coloring agent
	75mg/kg-Rabbit	
	105mg/kg-Mouse	
	>8000mg/kg-Rat	Carbon Black
	>5000mg/kg-Rat	Resin
	57000mg/kg-Rat	Polypropylene glycol
Inhalation LC50	Not available.	
Skin LD50	>2000mg/kg	Glycol ether

Local effects	Irritant: eye	Coloring agent / Resin
	Irritant: inhalation, skin	Carbon Black

Chronic toxicity and long term toxicity

Lungs may be affected by repeated or prolonged exposure at very high concentrations. Respiratory disorders.	Carbon Black
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Signs and Symptoms of overexposure and aggravated by exposure

Inhalation	irritation, respiratory allergies irritation	Additive Carbon Black / Resin
Skin contact	inflammation irritation, erosion irritation	Glycol ether Additive Coloring agent / Carbon Black Resin / Polypropylene glycol
Eye contact	irritation irritation, conjunctivitis mechanical irritation, discoloration of lids	Glycol ether / Additive / Resin Polypropylene glycol Coloring agent Carbon Black
Ingestion	nausea, vomiting	Coloring agent / Polypropylene glycol

Specific effects IARC Group 2B Carbon Black

12. ECOLOGICAL INFORMATION

Not available.

13. DISPOSAL CONSIDERATIONS

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

Contaminated packaging : Not applicable.

14. TRANSPORT INFORMATION

HS Code : 960810

15. REGULATORY INFORMATION

Regulations (Information of components)

Hazardous chemicals (OSHA HCS) : Carbon Black

EU labeling
Xi;R36/38 : Resin

CANADA Hazardous Products Act - Ingredient Disclosure List
1% over : Carbon Black

Hazard and safety information

Products are manufactured in accordance with ISO 8124-3 "Safety of Toys - Part 3"

16. OTHER INFORMATION

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 : (June 11, 2012). 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.

Safety data sheet for chemical products

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: SX-210 Blue [JETSTREAM]

Manufacture's name : MITSUBISHI PENCIL CO.,LTD.

Address : 5-23-37, HIGASHIOHI, SHINAGAWA, TOKYO, JAPAN

Telephone number : 03-3458-6281 Telefax number : 03-3450-0363

Creation Date : April 6, 2004

Revision Date : June 11, 2012

File No. : 061239A Rev. 2.5.01.05

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%)
Glycol ether	Registered	Registered	Registered	50- 80
Additives	Registered	Registered	Registered	10- 30
Coloring agents	Registered	Registered	Registered	10- 30
Resins	Registered	Registered	Registered	< 10
Polypropylene glycol	Registered	Registered	Polymer	< 10
1,2-Propanediol	57-55-6	Registered	2003380	< 10
Carbon Black	1333-86-4	Registered	2156099	< 1

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

3. HAZARDS IDENTIFICATION

Most important hazards : Not available.

Specific hazards : Information of components.

<Additive / Coloring agent>

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

<Resin>

MAJOR HEALTH HAZARDS: eye irritation

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

<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.

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 product : 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.

: 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	Glycol ether
oxidizing materials, strong oxidizers	Additive
oxidizing materials	Coloring agent / Resin / Polypropylene glycol
acids, bases, combustible materials,	1,2-Propanediol
halo carbons, metals, metal salts,	
oxidizing materials, reducing agents	
oxidizing materials, halogens	Carbon Black

Packaging materials : Not applicable.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

Engineering measures : Not required.

Control parameters (Information of components.)

OSHA	3.5mg/m ³ TWA	Carbon Black
ACGIH	10mg/m ³ TWA	Resin
	3.5mg/m ³ TWA	Carbon Black
EC	3.5mg/m ³ TWA	Carbon Black

Personal protective equipment : Not required.

9. PHYSICAL AND CHEMICAL PROPERTIES

[] : Information of components.

Physical state : Liquid.
 Color : Blue.
 Odor : None odor.
 pH : Not applicable.
 Boiling point : Not available. [Glycol ether/ 174 C]
 Melting point : <-20 C
 Flash point : Not available. [Glycol ether/ 68 C]
 Autoignition temperature : Not available. [Polypropylene glycol/ 201 C]
 Explosion limits : Not applicable.
 [Lower flammable limit / 1.2% , Upper flammable limit / 13.1% <Glycol ether>]
 Density : Not available.
 Vapor density (air=1) : Not available. [Glycol ether/ 4.1]
 Solubility in water : Not available.
 Evaporation rate : Not available.
 Volatile : 51-54%

10. STABILITY AND REACTIVITY

Stability : Stability.

Hazardous reactions : Will not occur.

Conditions to avoid : Avoid heat, flames, sparks and other sources of ignition.
Avoid contact with incompatible materials.

Materials to avoid : (Information of components.)

oxidizing materials, organic peroxides	Glycol ether
oxidizing materials, strong oxidizers	Additive
oxidizing materials	Coloring agent / Resin / Polypropylene glycol
acids, bases, combustible materials, halo	1,2-Propanediol
carbons, metals, metal salts, oxidizing	
materials, reducing agents	
oxidizing materials, halogens	Carbon Black

Hazardous decomposition products : (Information of components.)

oxides of carbon, water	common decomposition products
miscellaneous decomposition products.	Additive / Resin
oxides of nitrogen, carbon, halogenated	Coloring agent
compounds.	
carbon monoxide, carbon dioxide, organic	Carbon Black
products of decomposition, sulphoxides.	

11. TOXICOLOGICAL INFORMATION

(Information of components)

Acute toxicity

Ingestion LD50	4300mg/kg-Rat ≥5000mg/kg-Rat >5000mg/kg-Rat 57000mg/kg-Rat 20000mg/kg-Rat >8000mg/kg-Rat	Glycol ether Coloring agent Resin Polypropylene glycol 1,2-Propanediol Carbon Black
Inhalation LC50	Not available.	
Skin LD50	>2000mg/kg 20800mg/kg-Rabbit	Glycol ether 1,2-Propanediol

Local effects

Irritant; eye	Resin
Irritant; inhalation, skin	Carbon Black

Chronic toxicity and long term toxicityRepeated or prolonged contact may cause skin sensitization /
Mutagenic; positive

1,2-Propanediol

Lungs may be affected by repeated or prolonged exposure at
very high concentrations. Respiratory disorders.

Carbon Black

Signs and Symptoms of overexposure and aggravated by exposure

Inhalation	irritation, respiratory allergies irritation	Additive Coloring agent / Resin Carbon Black
	nausea, headache	1,2-Propanediol
Skin contact	inflammation irritation, erosion irritation	Glycol ether Additive Coloring agent / Resin Polypropylene glycol / Carbon Black
	irritation, allergic reaction	1,2-Propanediol
Eye contact	irritation	Glycol ether / Additive Coloring agent / Resin Polypropylene glycol
	irritation, pain mechanical irritation, discoloration of lids	1,2-Propanediol Carbon Black
Ingestion	laxative effect, dark-colored urine	Coloring agent
	nausea, vomiting allergic reaction, vomiting	Polypropylene glycol 1,2-Propanediol

Specific effects

IARC Group 2B

Carbon Black

12. ECOLOGICAL INFORMATION

Not available.

13. DISPOSAL CONSIDERATIONS

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

Contaminated packaging : Not applicable.

14. TRANSPORT INFORMATION

HS Code : 960810

15. REGULATORY INFORMATION

Regulations (Information of components)

Hazardous chemicals (OSHA HCS) : Carbon Black

EU labeling

Xi;R36/38 : Resin

CANADA Hazardous Products Act - Ingredient Disclosure List

1%over : 1,2-Propanediol / Carbon Black

Hazard and safety information

Products are manufactured in accordance with ISO 8124-3 "Safety of Toys - Part 3"

16. OTHER INFORMATION

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 : (June 11, 2012). 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.

Safety data sheet for chemical products

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: SX-210 Red [JETSTREAM]

Manufacture's name : MITSUBISHI PENCIL CO.,LTD.
Address : 5-23-37, HIGASHIOHI, SHINAGAWA, TOKYO, JAPAN
Telephone number : 03-3458-6281 Telefax number : 03-3450-0363

Creation Date : April 6, 2004
Revision Date : June 11, 2012
File No. : 061240A Rev. 2.5.03.05

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%)
Glycol ether	Registered	Registered	Registered	50- 80
Coloring agents	Registered	Registered	Registered	10- 30
Additives	Registered	Registered	Registered	10- 30
Resins	Registered	Registered	Polymer	< 10
Polypropylene glycol	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.

<Coloring agent>

MAJOR HEALTH HAZARDS: harmful if swallowed, skin irritation, eye irritation

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

<Additive>

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

<Resin>

MAJOR HEALTH HAZARDS: eye irritation

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.

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 product : 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.
: 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 Glycol ether
oxidizing materials Coloring agent / Resin / Polypropylene glycol
oxidizing materials, strong oxidizers Additive

Packaging materials : Not applicable.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

Engineering measures : Not required.

Control parameters (Information of components.)

OSHA	Not available.	
ACGIH	10mg/m3 TWA	Resin
EC	Not available.	

Personal protective equipment : Not required.

9. PHYSICAL AND CHEMICAL PROPERTIES

[] : Information of components.

Physical state : Liquid.
Color : Red.
Odor : None odor.
pH : Not applicable.
Boiling point : Not available. [Glycol ether/ 174 C]
Melting point : <-20 C
Flash point : Not available. [Glycol ether/ 68 C]
Autoignition temperature : Not available. [Glycol ether/ 395 C]
Explosion limits : Not applicable.
[Lower flammable limit / 1.2% , Upper flammable limit / 13.1% <Glycol ether>]
Density : Not available.
Vapor density (air=1) : Not available. [Glycol ether/ 4.1]
Solubility in water : Not available.
Evaporation rate : Not available.
Volatile : 50-53%

10. STABILITY AND REACTIVITY

Stability	: Stability.
Hazardous reactions	: Will not occur.
Conditions to avoid	: Avoid heat, flames, sparks and other sources of ignition. Avoid contact with incompatible materials.
Materials to avoid	: (Information of components.)
oxidizing materials, organic peroxides	Glycol ether
oxidizing materials	Coloring agent / Resin / Polypropylene glycol
oxidizing materials, strong oxidizers	Additive
Hazardous decomposition products	: (Information of components.)
oxides of carbon, water	common decomposition products
oxides of nitrogen, carbon, halogenated compounds.	Coloring agent
miscellaneous decomposition products.	Additive / Resin

11. TOXICOLOGICAL INFORMATION

(Information of components)

Acute toxicity

Ingestion LD50	4300mg/kg-Rat 400mg/kg-Rat(approximation Exciton) >5000mg/kg-Rat 57000mg/kg-Rat	Glycol ether Coloring agent Resin Polypropylene glycol
Inhalation LC50	Not available.	
Skin LD50	>2000mg/kg ≥2000mg/kg-Rat	Glycol ether Coloring agent

Local effects	Irritant:skin, eye Irritant:eye	Coloring agent Resin
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Chronic toxicity and long term toxicity
Not available.

Signs and Symptoms of overexposure and aggravated by exposure

Inhalation	irritation, respiratory allergies irritation	Additive Resin
Skin contact	inflammation irritation, red staining irritation, erosion irritation	Glycol ether Coloring agent Additive Resin / Polypropylene glycol
Eye contact	irritation	Glycol ether / Coloring agent / Additive Resin / Polypropylene glycol
Ingestion	nausea, vomiting	Polypropylene glycol

Specific effects	IARC Group 3	Coloring agent
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12. ECOLOGICAL INFORMATION

Not available.

13. DISPOSAL CONSIDERATIONS

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

Contaminated packaging : Not applicable.

14. TRANSPORT INFORMATION

HS Code : 960810

15. REGULATORY INFORMATION

Regulations (Information of components)

Hazardous chemicals (OSHA HCS) : Not restricted.

EU labeling

25% ≤ Xn; R22 : Coloring agent

Xi; R36/38 : Resin

CANADA Hazardous Products Act - Ingredient Disclosure List

: Not restricted.

Hazard and safety information

Products are manufactured in accordance with ISO 8124-3 " Safety of Toys - Part 3"

16. OTHER INFORMATION

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 : (June 11, 2012). 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.

Safety data sheet for chemical products

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: SX-210 Blue-black [JETSTREAM]

Manufacture's name : MITSUBISHI PENCIL CO.,LTD.
Address : 5-23-37, HIGASHIOHI, SHINAGAWA, TOKYO, JAPAN
Telephone number : 03-3458-6281 Telefax number : 03-3450-0363

Creation Date : September 8, 2004
Revision Date : June 11, 2012
File No. : 061241A Rev. 2.5.01.04

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%)
Glycol ether	Registered	Registered	Registered	50- 80
Resins	Registered	Registered	Polymer	10- 30
Coloring agents	Registered	Registered	Registered	10- 30
Polypropylene glycol	Registered	Registered	Registered	< 10
2-Phenoxyethanol	122-99-6	Registered	2045897	< 10
Additive	Registered	Registered	Polymer	< 10
Carbon Black	1333-86-4	Registered	2156099	< 1

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.

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-C1) : 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 Glycol ether

oxidizing materials Resin / Coloring agent / Polypropylene glycol /
2-Phenoxyethanol

oxidizing materials, halogens Carbon Black

Packaging materials : Not applicable.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

Engineering measures : Not required.

Control parameters (Information of components.)

OSHA	3.5mg/m3	Carbon Black
ACGIH	10mg/m3(Nuisance particulate) 3.5mg/m3(total dust) TWA	Resin Carbon Black
EC	3.5mg/m3	Carbon Black
AIHA	10mg/m3 TWA (aerosol)	Polypropylene glycol
	25ppm TWA (skin)	2-Phenoxyethanol

Personal protective equipment : Not required.

9. PHYSICAL AND CHEMICAL PROPERTIES

[] : Information of components.

Physical state and form : High viscous liquid.
 Color : Blue-black.
 Odor : None odor.
 pH : Not applicable.
 Boiling point : Not available. [Glycol ether/ 174 C]
 Melting point : <-20 C
 Flash point : Not applicable. [Glycol ether/ 68 C]
 Autoignition temperature : Not applicable. [Polypropylene glycol/ 201 C]
 Explosion limits : Not applicable.
 [Lower flammable limit / 1.2% , Upper flammable limit / 13.1% <Glycol ether>]
 Density : about 1.1 / 25 C
 Vapor density (air=1) : Not available. [Glycol ether/ 4.1]
 Solubility in water : Soluble.
 Evaporation rate : Not available.
 Volatile : 61-64%

10. STABILITY AND REACTIVITY

Stability : Stability.

Hazardous reactions : Will not occur.

Conditions to avoid : Avoid heat, flames, sparks and other sources of ignition.
 Avoid contact with incompatible materials.

Materials to avoid : (Information of components.)

oxidizing materials, organic peroxides	Glycol ether
oxidizing materials	Resin / Coloring agent / Polypropylene glycol / 2-Phenoxyethanol
oxidizing materials, halogens	Carbon Black

Hazardous decomposition products : (Information of components.)

oxides of carbon, water	common decomposition products
toxic and/or hazardous gases, miscellaneous decomposition products.	Resin
oxides of nitrogen, sulfur.	Coloring agent

11. TOXICOLOGICAL INFORMATION

(Information of components)

Acute toxicity

Ingestion LD50	4300mg/kg-Rat >3000mg/kg-Rat 3900mg/kg-Rat 57000mg/kg-Rat 933mg/kg-Mouse >8000mg/kg-Rat	Glycol ether Resin Coloring agent Polypropylene glycol 2-Phenoxyethanol Carbon Black
Inhalation LC50	Not available.	
Skin LD50	>2000mg/kg 5000mg/kg-Rabbit	Glycol ether 2-Phenoxyethanol

Local effects

Irritant; eye	Resin
Irritant; inhalation, skin,	2-Phenoxyethanol
Corrosive; eye	
Irritant; inhalation, skin	Carbon Black

Chronic toxicity and long term toxicity

The liquid defats the skin. The substance may have effects on the central nervous system, resulting in impaired functions.

Respiratory disorders.

Signs and Symptoms of overexposure and aggravated by exposure

Inhalation	irritation	Resin / Coloring agent / Carbon Black
	irritation, sore throat	2-Phenoxyethanol
Skin contact	inflammation	Glycol ether
	irritation	Resin / Coloring agent /
	irritation, redness	2-Phenoxyethanol
Eye contact	irritation	Glycol ether /
	irritation, burns	Resin / Coloring agent /
	mechanical irritation,	2-Phenoxyethanol
		Carbon Black
Ingestion	laxative effect, dark-colored urine	Coloring agent
	nausea, vomiting	Polypropylene glycol
	sore throat, nausea	2-Phenoxyethanol

Specific effects IARC Group 2B Carbon Black

12. ECOLOGICAL INFORMATION

Not available.

13. DISPOSAL CONSIDERATIONS

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

Contaminated packaging : Not applicable.

14. TRANSPORT INFORMATION

HS Code : 960810

15. REGULATORY INFORMATION

Regulations (Information of components)

Hazardous chemicals (OSHA HCS) : Carbon Black

EU labeling

25%≤Xn;R22, 20%≤Xi;R36 : 2-Phenoxyethanol

CANADA Hazardous Products Act - Ingredient Disclosure List

1%over : 2-Phenoxyethanol / Carbon Black

Hazard and safety information

Products are manufactured in accordance with ISO 8124-3 " Safety of Toys - Part 3"

16. OTHER INFORMATION

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 : (June 11, 2012). 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.