

Safety data sheet for chemical products

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: SXN-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
 Telex number : 2422337 MBPENC J.

Creation Date : Mar. 20, 2006
 Revision Date : Apr. 15, 2008
 File No. : 061273A Rev. 2.5.02.03

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	56539-66-3	Registered	2602524	50- 80
Coloring agents	Registered	Registered	Registered	10- 30
Carbon Black	1333-86-4	Registered	2156099	< 10
Resin	Registered	Registered	Polymer	< 10
Additives	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.

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-10) : about 300mg]

5. FIRE-FIGHTING MEASURES

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
 strong oxidizers Coloring agent
 oxidizing materials, halogens Carbon Black
 oxidizing materials Resin / Additive

- 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 (Nuisance particulate)	Resin
EC	3.5mg/m ³ TWA	Carbon Black
AIHA	10mg/m ³ TWA (aerosol)	Additive

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. [Glycol ether/ 174 C]
Melting point	: <-20 C
Flash point	: Not available. [Glycol ether/ 68 C]
Autoignition temperature	: Not available. [Additive/ 201 C]
Explosion limits	: Not applicable. [Lower flammable limit / 1.2% , Upper flammable limit / 13.1% <Glycol ether>]
Density	: about 1.1 / 25 C
Vapour density (air=1)	: Not available. [Glycol ether/ 4.1]
Solubility in water	: Not available. [Glycol ether/ soluble]
Evaporation rate	: Not available.
Volatile	: 54-57%

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
strong oxidizers	Coloring agent
oxidizing materials, halogens	Carbon Black
oxidizing materials	Resin / Additive
Hazardous decomposition products	: (Information of components.)
oxides of carbon, water	common decomposition products
oxides of nitrogen, sulfur.	Coloring agent
organic products of decomposition,	Carbon Black
miscellaneous decomposition products.	Resin

11. TOXICOLOGICAL INFORMATION

(Information of components)

Acute toxicity		
Ingestion LD50	4300mg/kg-Rat 3900mg/kg-Rat >8000mg/kg-Rat >5000mg/kg-Rat 57000mg/kg-Rat	Glycol ether Coloring agent Carbon Black Resin Additive
Inhalation LC50	Not available.	
Skin LD50	>2000mg/kg	Glycol ether
Local effects	Irritant;inhalation, skin Irritant;eye	Carbon Black Resin

Chronic toxicity and long term toxicity

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

Carbon Black

Signs and Symptos of overexposure and aggravated by exposure

Inhalation	irritation	Carbon Black / Resin
Skin contact	inflammation irritation	Glycol ether Coloring agent / Carbon Black / Resin / Additive
Eye contact	irritation mechanical irritation, discoloration of lids	Glycol ether / Coloring agent / Resin / Additive Carbon Black
Ingestion	nausea,vomiting	Additive
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 : Not restricted.

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

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.

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 : (April 15, 2008). 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: SXN-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
 Telex number : 2422337 MBPENC J.

Creation Date : Mar. 20, 2006
 Revision Date : Apr. 15, 2008
 File No. : 061274A Rev. 2.5.03.04

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	56539-66-3	Registered	2602524	50- 80
Coloring agents	Registered	Registered	Registered	10- 30
Resins	Registered	Registered	Polymer	< 10
Additives	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-10) : about 300mg]

5. FIRE-FIGHTING MEASURES

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 / Additive
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 TWA	Carbon Black
ACGIH	10mg/m3(Nuisance particulate)	Resin
	3.5mg/m3 TWA	Carbon Black
EC	3.5mg/m3 TWA	Carbon Black
AIHA	10mg/m3 TWA (aerosol)	Additive

Personal protective equipment : Not required.

9. PHYSICAL AND CHEMICAL PROPERTIES

[]: Information of components.

Physical state and form	: High viscous liquid.
Colour	: Blue.
Odour	: None odour.
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. [Additive/ 201 C]
Explosion limits	: Not applicable. [Lower flammable limit / 1.2% , Upper flammable limit / 13.1% <Glycol ether>]
Density	: about 1.1 / 25 C
Vapour density (air=1)	: Not available. [Glycol ether/ 4.1]
Solubility in water	: Not available. [Glycol ether/ 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. Avoid contact with incompatible materials.
Materials to avoid	: (Information of components.)
oxidizing materials, organic peroxides	Glycol ether
oxidizing materials	Coloring agent / Resin / Additive
oxidizing materials, halogens	Carbon Black
Hazardous decomposition products	: (Information of components.)
oxides of carbon, water	common decomposition products
oxides of nitrogen, sulfur.	Coloring agent
toxic and/or hazardous gases,	Resin
miscellaneous decomposition products.	
organic products of decomposition, sulphoxides.	Carbon Black

11. TOXICOLOGICAL INFORMATION

(Information of components)

Acute toxicity		
Ingestion LD50	4300mg/kg-Rat >=5000mg/kg-Rat >3000mg/kg-Rat 57000mg/kg-Rat >8000mg/kg-Rat	Glycol ether Coloring agent Resin Additive Carbon Black
Inhalation LC50	Not available.	
Skin LD50	>2000mg/kg	Glycol ether
Local effects	Irritant;eye Irritant;inhalation, skin	Resin Carbon Black

Chronic toxicity and long term toxicity

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

Carbon Black

Signs and Symptos of overexposure and aggravated by exposure

Inhalation	irritation	Coloring agent / Resin / Carbon Black
Skin contact	inflammation irritation	Glycol ether Coloring agent / Resin / Additive / Carbon Black
Eye contact	irritation mechanical irritation, discoloration of lids	Glycol ether / Coloring agent / Resin / Additive Carbon Black
Ingestion	laxative effect, dark-colored urine nausea, vomiting	Coloring agent Additive

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 : Not restricted.

CANADA Hazardous Products Act - Ingredient Disclosure List

1%over : Carbon Black

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.

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 : (April 15, 2008). 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: SXN-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
 Telex number : 2422337 MBPENC J.

Creation Date : Mar. 20, 2006
 Revision Date : Apr. 15, 2008
 File No. : 061275A Rev. 2.5.02.03

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	56539-66-3	Registered	2602524	50- 80
Coloring agents	Registered	Registered	Registered	30- 50
Resin	Registered	Registered	Polymer	< 10
Additives	Registered	Registered	Polymer	< 10

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

3. HAZARDS IDENTIFICATION

Most important hazards : Not available.

Specific hazards : Not available.

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-10) : about 300mg]

5. FIRE-FIGHTING MEASURES

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
strong oxidizers	Coloring agent
oxidizing materials	Resin / 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(Nuisance particulate)	Resin
EC	Not available.	
JAIH	2mg/m3(Respirable fraction), 8mg/m3(Total dust)	Coloring agent
AIHA	10mg/m3 TWA (aerosol)	Additive

Personal protective equipment : Not required.

9. PHYSICAL AND CHEMICAL PROPERTIES

[] : Information of components.

Physical state and form	: High viscous liquid.
Colour	: Red.
Odour	: None odour.
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. [Additive/ 201 C]
Explosion limits	: Not applicable. [Lower flammable limit / 1.2% , Upper flammable limit / 13.1% <Glycol ether>]
Density	: about 1.1 / 25 C
Vapour density (air=1)	: Not available. [Glycol ether/ 4.1]
Solubility in water	: Not available. [Glycol ether/ 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. Avoid contact with incompatible materials.
Materials to avoid	: (Information of components.)
oxidizing materials, organic peroxides	Glycol ether
strong oxidizers	Coloring agent
oxidizing materials	Resin / Additive
Hazardous decomposition products	: (Information of components.)
oxides of carbon, water	common decomposition products
oxides of nitrogen, sulfur.	Coloring agent
miscellaneous decomposition products.	Resin

11. TOXICOLOGICAL INFORMATION

(Information of components)

Acute toxicity		
Ingestion LD50	4300mg/kg-Rat 50-200mg/kg-Rat, >=2000mg/kg-Rat >5000mg/kg-Rat 57000mg/kg-Rat	Glycol ether Coloring agent Resin Additive
Inhalation LC50	Not available.	
Skin LD50	>2000mg/kg >=2000mg/kg-Rat	Glycol ether Coloring agent
Local effects	Irritant;eye	Resin
Chronic toxicity and long term toxicity		Not available.

Signs and Symptos of overexposure and aggravated by exposure

Inhalation	irritation	Resin
Skin contact	inflammation irritation	Glycol ether Coloring agent / Resin / Additive
Eye contact	irritation	Glycol ether / Coloring agent / Resin / Additive
Ingestion	nausea,vomiting	Additive
Specific effects	Not available.	

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 : Not restricted.

CANADA Hazardous Products Act - Ingredient Disclosure List
: Not restricted.

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.

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 : (April 15, 2008). 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: SXN-210 Green [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
 Telex number : 2422337 MBPENC J.

Creation Date : Apr. 15, 2008
 Revision Date :
 File No. : 061320A Rev. 2.5.02.01

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	56539-66-3	Registered	2602524	50- 80
Coloring agents	Registered	Registered	Registered	10- 30
Resins	Registered	Registered	Polymer	< 10
Additives	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 : about 300mg]

5. FIRE-FIGHTING MEASURES

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 / Additive
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 TWA	Carbon Black
ACGIH	10mg/m3(Nuisance particulate)	Resin
	3.5mg/m3 TWA	Carbon Black
EC	3.5mg/m3 TWA	Carbon Black
AIHA	10mg/m3 TWA (aerosol)	Additive
JAIH	2mg/m3(Respirable fraction), 8mg/m3(Total dust)	Coloring agent

Personal protective equipment : Not required.

9. PHYSICAL AND CHEMICAL PROPERTIES

[] : Information of components.

Physical state and form	: High viscous liquid.
Colour	: Green.
Odour	: None odour.
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. [Additive/ 201 C]
Explosion limits	: Not applicable. [Lower flammable limit / 1.2% , Upper flammable limit / 13.1% <Glycol ether>]
Density	: ablut 1.1 / 25 C
Vapour density (air=1)	: Not available. [Glycol ether/ 4.1]
Solubility in water	: Not available. [Glycol ether/ soluble]
Evaporation rate	: Not available.
Volatile	: 48-51%

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 / Additive
oxidizing materials, halogens	Carbon Black
Hazardous decomposition products	: (Information of components.)
oxides of carbon, water	common decomposition products
oxides of nitrogen, sulfur, hydrogen chloride gas.	Coloring agent
formaldehyde, oxides of nitrogen, sulfur,	Resin
miscellaneous decomposition products.	
organic products of decomposition, sulphoxides.	Carbon Black

11. TOXICOLOGICAL INFORMATION

(Information of components)

Acute toxicity		
Ingestion LD50	4300mg/kg-Rat 300-2000mg/kg-Rat >5000mg/kg-Rat 57000mg/kg-Rat >8000mg/kg-Rat	Glycol ether Coloring agent Resin Additive Carbon Black
Inhalation LC50	>1.8mg/l-Rat	Coloring agent
Skin LD50	>2000mg/kg	Glycol ether
Local effects		
	Irritant;eye Irritant;inhalation, skin	Resin Carbon Black

Chronic toxicity and long term toxicity

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

Carbon Black

Signs and Symptos of overexposure and aggravated by exposure

Inhalation	irritation	Coloring agent / Resin / Carbon Black
Skin contact	inflammation irritation	Glycol ether Coloring agent / Resin / Additive / Carbon Black
Eye contact	irritation mechanical irritation, discoloration of lids	Glycol ether / Coloring agent / Resin / Additive Carbon Black
Ingestion	laxative effect,dark-colored urine nausea,vomiting	Coloring agent Additive

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 : Not restricted.

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

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.

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 : (April 15, 2008). 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: SXN-210 Violet [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
 Telex number : 2422337 MBPENC J.

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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	56539-66-3	Registered	2602524	50- 80
Coloring agents	Registered	Registered	Registered	10- 30
Resins	Registered	Registered	Polymer	< 10
Additives	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 : about 300mg]

5. FIRE-FIGHTING MEASURES

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 / Additive
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 TWA	Carbon Black
ACGIH	10mg/m3(Nuisance particulate)	Resin
	3.5mg/m3 TWA	Carbon Black
EC	3.5mg/m3 TWA	Carbon Black
AIHA	10mg/m3 TWA (aerosol)	Additive
JAIH	2mg/m3(Respirable fraction), 8mg/m3(Total dust)	Coloring agent

Personal protective equipment : Not required.

9. PHYSICAL AND CHEMICAL PROPERTIES

[] : Information of components.

Physical state and form	: High viscous liquid.
Colour	: Violet.
Odour	: None odour.
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. [Additive/ 201 C]
Explosion limits	: Not applicable. [Lower flammable limit / 1.2% , Upper flammable limit / 13.1% <Glycol ether>]
Density	: ablut 1.1 / 25 C
Vapour density (air=1)	: Not available. [Glycol ether/ 4.1]
Solubility in water	: Not available. [Glycol ether/ soluble]
Evaporation rate	: Not available.
Volatile	: 57-60%

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 / Additive
oxidizing materials, halogens	Carbon Black
Hazardous decomposition products	: (Information of components.)
oxides of carbon, water	common decomposition products
oxides of nitrogen, sulfur.	Coloring agent / Coloring agent
toxic and/or hazardous gases,	Resin
miscellaneous decomposition products.	
organic products of decomposition, sulphoxides.	Carbon Black

11. TOXICOLOGICAL INFORMATION

(Information of components)

Acute toxicity		
Ingestion LD50	4300mg/kg-Rat 50-200mg/kg-Rat >3000mg/kg-Rat 57000mg/kg-Rat >8000mg/kg-Rat	Glycol ether Coloring agent Resin Additive Carbon Black
Inhalation LC50	Not available.	
Skin LD50	>2000mg/kg >=2000mg/kg-Rat	Glycol ether Coloring agent
Local effects	Irritant;eye Irritant;inhalation, skin	Resin Carbon Black

Chronic toxicity and long term toxicity

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

Carbon Black

Signs and Symptos of overexposure and aggravated by exposure

Inhalation	irritation	Coloring agent / Resin / Carbon Black
Skin contact	inflammation irritation	Glycol ether Coloring agent / Resin / Additive / Carbon Black
Eye contact	irritation mechanical irritation, discoloration of lids	Glycol ether / Coloring agent / Resin / Additive Carbon Black
Ingestion	laxative effect, dark-colored urine nausea, vomiting	Coloring agent Additive
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 : Not restricted.

CANADA Hazardous Products Act - Ingredient Disclosure List

1%over : Carbon Black

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.

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 : (April 15, 2008). 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.