

# Safety data sheet for chemical products

## 1. PRODUCT AND COMPANY IDENTIFICATION

Product name: SN-220EW Black

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 1, 2008  
Revision Date : November 7, 2012  
File No. : 060148A      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%)
Benzyl alcohol	100-51-6	Registered	2028599	10- 30
Glycol ether	Registered	Registered	Registered	10- 30
Resins	Registered	Registered	Registered	10- 30
Additives	Registered	Registered	Registered	10- 30
Coloring agents	Registered	Registered	Registered	10- 30
Carbon Black	1333-86-4	Registered	2156099	<10
2-Phenoxyethanol	122-99-6	Registered	2045897	<10

※This ink contains over 0.1% [4,4-Bis(dimethylamino)benzopenone](CAS No.90-94-8) as impurities deriving from a coloring agent.

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

## 3. HAZARDS IDENTIFICATION

Most important hazards : Not available.

Specific hazards : Information of components.

<Benzyl alcohol>

MAJOR HEALTH HAZARDS: respiratory tract irritation, skin irritation, eye irritation, central nervous system depression

<Carbon Black>

MAJOR HEALTH HAZARDS: suspect cancer hazard (in animals)

<2-Phenoxyethanol>

MAJOR HEALTH HAZARDS: eye burns, respiratory tract irritation, skin irritation

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## 4. FIRST-AID MEASURES

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### 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(SNP-10) : about 230mg]

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## 5. FIRE-FIGHTING MEASURES

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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.

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## 6. ACCIDENTAL RELEASE MEASURES

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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.

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## 7. HANDLING AND STORAGE

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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.)
- |  |                                   |
|--|-----------------------------------|
| acids, metals, oxidizing materials,        | Benzyl alcohol                    |
| combustible materials, metal salts         |                                   |
| oxidizing materials, organic peroxides     | Glycol ether                      |
| oxidizing materials, reducing agents       | Resin                             |
| halogens, acids, metals, metal salts,      | Additive                          |
| oxidizing materials, combustible materials |                                   |
| oxidizing materials                        | Coloring agent / 2-Phenoxyethanol |
| oxidizing materials, halogens              | Carbon Black                      |
- Packaging materials : Not applicable.

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## 8. EXPOSURE CONTROL / PERSONAL PROTECTION

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Engineering measures : Not required.

## Control parameters (Information of components.)

OSHA	5 mg/m3 TWA(respirable dust fraction)	Additive
	15 mg/m3 TWA(total dust)	
	6mg/m3 TWA (<1% crystalline silica)	
	5mg/m3(Respirable flaction)	Coloring agent
ACGIH	15mg/m3(Total dust) [Nuisance Dust]	
	3.5mg/m3 TWA	Carbon Black
	10mg/m3 TWA	Resin
	10 mg/m3 TWA (total particulate) (<1% quartz)	Additive
	10mg/m3 TWA	Coloring agent
EC	3.5mg/m3 TWA	Carbon Black
	3.5mg/m3 TWA	Carbon Black

Personal protective equipment : Not required.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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[ ] : 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. [Glycol ether/ 395 C]

Explosion limits : Not applicable.  
[ Lower flammable limit / 1.2% , Upper flammable limit / 13.1% <Glycol ether> ]  
Density : Not applicable. / 25 C  
Vapor density (air=1) : Not available. [Glycol ether/ 4.1]  
Solubility in water : Not available.  
Evaporation rate : Not available.  
Volatile : 89-92%

## 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.)  
acids, metals, oxidizing materials, combustible materials, metal salts Benzyl alcohol  
oxidizing materials, organic peroxides Glycol ether  
oxidizing materials, reducing agents Resin  
halogens, acids, metals, metal salts, oxidizing materials, combustible materials Additive  
oxidizing materials Coloring agent / 2-Phenoxyethanol  
oxidizing materials, halogens Carbon Black  
Hazardous decomposition products : (Information of components.)  
oxides of carbon, water common decomposition products  
miscellaneous decomposition products, oxides of nitrogen. Resin  
miscellaneous decomposition products, crystalline silica.. Additive  
oxides of nitrogen, 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	1230mg/kg-Rat	Benzyl alcohol
	4300mg/kg-Rat	Glycol ether
	>5000mg/kg-Rat	Resin
	1040mg/kg-Rabbit	Resin
	1850mg/kg-Rat	Additive
	75mg/kg-Rabbit	Coloring agent
	105mg/kg-Mouse	
	>8000mg/kg-Rat	Carbon Black
	933mg/kg-Mouse	2-Phenoxyethanol
	1260mg/kg-Rat	

Inhalation LC50	1000ppm-8H-Rat	Benzyl alcohol
Skin LD50	2000mg/kg-Rabbit >2000mg/kg 5000mg/kg-Rabbit	Benzyl alcohol Glycol ether 2-Phenoxyethanol
Local effects	Irritant;inhalation, skin, eye Irritant;eye Irritant : eye, eyeIrritant Irritant;inhalation, skin Irritant;inhalation, skin, eye	Benzyl alcohol Resin / Coloring agent Additive Carbon Black 2-Phenoxyethanol
Chronic toxicity and long term toxicity		
Repeated or prolonged contact may cause skin sensitization.		Benzyl alcohol
Lungs may be affected by repeated or prolonged exposure at very high concentrations. Respiratory disorders.		Carbon Black
The liquid defats the skin. The substance may have effects on the central nervous system, resulting in impaired functions.		2-Phenoxyethanol
Signs and Symptoms of overexposure and aggravated by exposure		
Inhalation	irritation,nausea irritation  irritation,difficulty breathing irritation,sore throat	Benzyl alcohol Resin / Coloring agent Carbon Black Additive 2-Phenoxyethanol
Skin contact	irritation,redness inflammation irritation	Benzyl alcohol / 2-Phenoxyethanol Glycol ether Resin / Additive / Coloring agent Carbon Black
Eye contact	irritation,redness irritation irritation mechanical irritation,discoloration of lids irritation,burns	Benzyl alcohol Glycol ether / Resin / Coloring agent Additive Carbon Black  2-Phenoxyethanol
Ingestion	nausea,headache diarrhea,pneumonitis irritation,nausea nausea,gastric disturbances sore throat,nausea	Benzyl alcohol Resin Additive Coloring agent 2-Phenoxyethanol
Specific effects	IARC Group 3 IARC Group 2B	Resin / Additive Carbon Black / 4,4-Bis(dimethylamino)benzopenone

## 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

25%≤Xn;R20/22

: Benzyl alcohol

Xn;R22, Xi;R36

: 2-Phenoxyethanol

T;R45, Xn;R68, Xi;R41

: 4,4-Bis(dimethylamino)benzopenone

CANADA Hazardous Products Act - Ingredient Disclosure List

1%over

: Benzyl alcohol / Additive

Carbon Black / 2-Phenoxyethanol

Hazard and safety information

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

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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 : (November 7, 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

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

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

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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%)
Benzyl alcohol	100-51-6	Registered	2028599	10- 30
2-Phenoxyethanol	122-99-6	Registered	2045897	10- 30
Additives	Registered	Registered	Registered	10- 30
Coloring agents	Registered	Registered	Registered	10- 30
Resins	Registered	Registered	Registered	10- 30
Glycol ether	Registered	Registered	Registered	<10

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

## 3. HAZARDS IDENTIFICATION

Most important hazards : Not available.

Specific hazards : Information of components.

<Benzyl alcohol>

MAJOR HEALTH HAZARDS: respiratory tract irritation, skin irritation, eye irritation, central nervous system depression

<2-Phenoxyethanol>

MAJOR HEALTH HAZARDS: eye burns, respiratory tract irritation, skin irritation

## 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(SNP-10) : about 230mg]

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## 5. FIRE-FIGHTING MEASURES

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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.

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## 6. ACCIDENTAL RELEASE MEASURES

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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.

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## 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.)**

acids, metals, oxidizing materials, combustible materials, metal salts	Benzyl alcohol
oxidizing materials Strong oxidizers, oxidizing materials, reducing agents	2-Phenoxyethanol / Coloring agent Resin
halogens, acids, metals, metal salts, oxidizing materials, combustible	Additive
oxidizing materials, organic peroxides	Glycol ether

Packaging materials : Not applicable.

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**8. EXPOSURE CONTROL / PERSONAL PROTECTION**

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Engineering measures : Not required.

**Control parameters (Information of components.)**

OSHA	5 mg/m3 TWA(respirable dust fraction)	Additive
	15 mg/m3 TWA(total dust)	
	6mg/m3 OSHA TWA (<1% crystalline silica)	Additive
	5mg/m3(Respirable flaction)	Coloring agent
	15mg/m3(Total dust)	
ACGIH	10mg/m3 TWA	Resin
	10 mg/m3 TWA (total particulate) (<1% quartz)	Additive
	10mg/m3 TWA	Coloring agent
EC	Not available.	

Personal protective equipment : Not required.

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**9. PHYSICAL AND CHEMICAL PROPERTIES**

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[ ] : 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. [Glycol ether/ 395 C]
Explosion limits	: Not applicable.
	[ Lower flammable limit / 1.2% , Upper flammable limit / 13.1% <Glycol ether> ]
Density	: Not applicable. / 25 C
Vapor density (air=1)	: Not available. [Glycol ether/ 4.1]
Solubility in water	: Not available.
Evaporation rate	: Not available.
Volatile	: 89-92%

## 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.)

acids, metals, oxidizing materials, combustible materials, metal salts	Benzyl alcohol
oxidizing materials	2-Phenoxyethanol /
	Coloring agent
Strong oxidizers, oxidizing materials, reducing agents	Resin
halogens, acids, metals, metal salts, oxidizing materials, combustible	Additive
oxidizing materials, organic peroxides	Glycol ether

Hazardous decomposition products : (Information of components.)

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

## 11. TOXICOLOGICAL INFORMATION

(Information of components)

Acute toxicity

Ingestion LD50	1230mg/kg-Rat	Benzyl alcohol
	933mg/kg-Mouse	
	1260mg/kg-Rat	Resin Glycol ether Coloring agent
	>3000mg/kg-Rat	
	4300mg/kg-Rat	
	413mg/kg-Rat	
	75mg/kg-Rabbit	
	105mg/kg-Mouse	
Inhalation LC50	1000ppm-8H-Rat	Benzyl alcohol
Skin LD50	2000mg/kg-Rabbit	Benzyl alcohol / Glycol ether
	5000mg/kg-Rabbit	

Local effects

Irritant: inhalation, skin, eye	Benzyl alcohol /
	2-Phenoxyethanol
Irritant: eye	Resin / Coloring agent
Irritant: inhalation, skin, eye	Additive

Chronic toxicity and long term toxicity

Repeated or prolonged contact may cause skin sensitization.	Benzyl alcohol
The liquid defats the skin. The substance may have effects on the central nervous system, resulting in impaired functions.	2-Phenoxyethanol

## Signs and Symptoms of overexposure and aggravated by exposure

Inhalation	irritation,nausea irritation,sore throat irritation,pneumonitis irritation,burns irritation	Benzyl alcohol 2-Phenoxyethanol Resin Additive Coloring agent
Skin contact	irritation,redness irritation,sensitization irritation,burns inflammation irritation,dermatitis	Benzyl alcohol / 2-Phenoxyethanol Resin Additive Glycol ether Coloring agent
Eye contact	irritation,redness irritation,burns irritation burns, irritation eye damage,irritation	Benzyl alcohol 2-Phenoxyethanol Resin / Glycol ether Additive Coloring agent
Ingestion	nausea,headache sore throat,nausea diarrhea,pneumonitis irritation, burns harmful,nausea	Benzyl alcohol 2-Phenoxyethanol Resin Additive Coloring agent
Specific effects	IARC Group 3	Resin / Additive

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## 12. ECOLOGICAL INFORMATION

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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) : Not restricted.

### EU labeling

25%≤Xn;R20/22 : Benzyl alcohol  
Xn;R22, Xi;R36 : 2-Phenoxyethanol

### CANADA Hazardous Products Act - Ingredient Disclosure List

1%over : Benzyl alcohol / 2-Phenoxyethanol / Additive

### Hazard and safety information

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

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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 : (November 7, 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.