Revision Date: March 2, 2006

# Safety data sheet for chemical products

# 1. PRODUCT AND COMPANY IDENTIFICATION

Product name: SN-220 Red [POWER TANK]

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%)
Benzyl alcohol	100-51-6	Registered	2028599	10- 30
Coloring agents	Registered	Registered	Registered	10- 30
2-Phenoxyethanol	122-99-6	Registered	2045897	10- 30
Resins	Registered	Registered	Polymer	10- 30
Oleic acid	112-80-1	Registered	Registered	< 10
Additives	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.

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### Ingestion:

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

[Ink quantity of refill(SNP-10) : about 230mg]

### 5. FIRE-FIGHTING MEASURES

Fire and explosion measures : Slight fire hazard.

Exitinguishing 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.)

acids, metals, oxidizing materials, Benzyl alcohol

combustible materials, metal salts

oxidizing materials Coloring agent / 2-Phenoxyethanol

oxidizing materials, reducing agents
metals, oxidizing materials
halogens, acids, metals, metal salts,
Additive

oxidizing materials, combustible materials

Packaging materials : Not applicable.

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# 8. EXPOSURE CONTROL / PERSONAL PROTECTION

Engineering measures : Not required.

Control parameters (Information of components.)

OSHA	5mg/m3 TWA(respirable dust fraction),	Oleic acid
	6mg/m3 OSHA TWA (<1% crystalline silica)	Additive
ACGIH	10mg/m3(Nuisance particulate)	Resin
	10mg/m3 TWA	Oleic acid
	10mg/m3 TWA(total particulate)(<1%	Additive
EC	Not available.	
JAIH	2mg/m3(respirable fraction),	Coloring agent
	8mg/m3(total dust)	
AIHA	10ppm recommended TWA	Benzyl alcohol
	25ppm TWA(DOW CHEMICAL)(skin)	2-Phenoxyethanol

Personal protective equipment : Not required.

# 9. PHYSICAL AND CHEMICAL PROPERTIES

[ ]: Information of components.

Physical state and form : High viscous liquid.

 ${\bf Colour} \qquad \qquad : {\bf Red}.$ 

Odour : None odour. pH : Not applicable.

Boiling point : Not available. [Benzyl alcohol/ 205 C]

Melting point : <-20 C

Flash point : Not available. [Benzyl alcohol/ 93 C]
Autoignition temperature : Not available. [Oleic acid/ 363 C]

Explosion limits : Not applicable.

[Lower flammable limit / 1.3%, Upper flammable limit / 13% <Benzyl alcohol>]

Density : 1.1±0.05 / 25 C

Vapour density (air=1) : Not available. [Benzyl alcohol/ 3.7]

Solubulity in water : Not available. [Benzyl alcohol/ 3.5% @20• ]

Evaporation rate : Not available. Volatile : 46-49%

## 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 Benzyl alcohol

materials, metal salts

oxidizing materials Coloring agent / 2-Phenoxyethanol

oxidizing materials, reducing agents
metals, oxidizing materials
halogens, acids, metals, metal salts, oxidizing

Resin
Oleic acid
Additive

materials, combustible materials

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Hazardous decomposition products : (Information of components.)

oxides of carbon, water common decomposition products

oxides of ,nitrogen, hydrogen chloride gas and Coloring agent

other potentiality toxic fumes.

oxides of nitrogen, hazardous gases, Resin

miscellaneous decomposition products.

miscellaneous decomposition products. Oleic acid crystalline silica. Additive

# 11.TOXICOLOGICAL INFORMATION

#### (Information of components)

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Acute	tox:	1	citv

Ingestion LD50	100mg/kg-wild bird,	Benzyl alcohol
-	1230mg/kg-Rat	
	• 2000mg/kg-Rat	Coloring agent
	933mg/kg-Mouse	2-Phenoxyethanol
	>3000mg/kg-Rat	Resin
	25000mg/kg-Rat	Oleic acid
	1850mg/kg-Rat	Additive
Inhalation LC50	1000ppm-8H-Rat	Benzyl alcohol
	• 2250mg/kg-Rat	Coloring agent
Skin LD50	2000mg/kg-Rabbit	Benzyl alcohol
	• 2000mg/kg-Rat	Coloring agent
	5000mg/kg-Rabbit	2-Phenoxyethanol
Local effects	Irritant;skin, eye, inhalation	Benzyl alcohol
	Irritant;inhalation, skin	2-Phenoxyethanol
	Corrosive;eye	
	Irritant;eye	Resin

#### Chronic toxicity and long term toxicity

Repeated or prolonged contact may cause skin sensitization.

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

Benzyl alcohol
2-Phenoxyethanol

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

Inhalation	irritation,nausea	Benzyl alcohol
	irritation,sore throat	2-Phenoxyethanol
	irritation,pneumonitis	Resin
	difficulty breathing,	Oleic acid
	interfere with respiratory	
	irritation	Additive
Skin contact	irritation,redness	Benzyl alcohol / 2-Phenoxyethanol
	irritation	Coloring agent / Oleic acid /
		Additive
	irritation, sensitization	Resin
Eye contact	irritation,redness	Benzyl alcohol
	irritation	Coloring agent / Resin /
		Oleic acid / Additive
	irritation,burns	2-Phenoxyethanol
Ingestion	nausea,headache	Benzyl alcohol
	sore throat,nausea	2-Phenoxyethanol
	diarrhea,pneumonitis	Resin
	irritation,nausea	Oleic acid
Specific effects	IARC Group 3	Resin / Additive

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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;R20/22 : Benzyl alcohol 25%<=Xn;R22, 20%<=Xi;R36 : 2-Phenoxyethanol

R22: Harmful if swallowed.

R20/22: Harmful by inhalation and if swallowed.

R36: Irritating to eyes.

CANADA Hazardous Products Act - Ingredient Disclosure List

: Benzyl alcohol / 2-Phenoxyethanol / Oleic acid 1%over

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: (March 2, 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.