

Safety data sheet for chemical products

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: SN-220 Black [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.

Creation Date : March 29, 2004

Revision Date : March 2, 2006

File No. : 060124A Rev. 2.5.04.03

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%)
Benzyl alcohol	100-51-6	Registered	2028599	30- 50
Coloring agents	Registered	Registered	Registered	30- 50
Ethanol, 2-(phenylmethoxy)-	622-08-2	Registered	2107193	10- 30
Resins	Registered	Registered	Polymer	< 10
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

<Ethanol, 2-(phenylmethoxy)->

MAJOR HEALTH HAZARDS: eye 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]

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.)

acids, metals, oxidizing materials, combustible materials, metal salts Benzyl alcohol

strong acids, oxidizing agents Coloring agent

oxidizing materials Ethanol, 2-(phenylmethoxy)-

oxidizing materials, reducing agents Resin

metals, oxidizing materials Oleic acid

halogens, acids, metals, metal salts, oxidizing materials, combustible materials Additive

Packaging materials : Not applicable.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

Engineering measures : Not required.

Control parameters (Information of components.)

OSHA	15mppcf TWA (respirable dust) 5mg/m3 TWA(respirable dust fraction), 15mg/m3 TWA(total dust) 6mg/m3 OSHA TWA (<1% crystalline silica)	Coloring agent Oleic acid Additive
ACGIH	2mg/m3 TWA (respirable particulate) (all forms except graphite fibers) 10mg/m3(Nuisance particulate) 10mg/m3 TWA 10mg/m3 TWA(total particulate)(<1% quartz)	Coloring agent Resin Oleic acid Additive
EC	Not available.	
JAIH	2mg/m3(respirable fraction), 8mg/m3(total dust)	Coloring agent
AIHA	10ppm recommended TWA	Benzyl alcohol

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. [Benzyl alcohol/ 205 C]
Melting point	: <-20 C
Flash point	: Not available. [Benzyl alcohol/ 93 C]
Autoignition temperature	: Not available. [Ethanol, 2-(phenylmethoxy)-/ 350 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	: 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.)

acids, metals, oxidizing materials, combustible materials, metal salts	Benzyl alcohol
strong acids, oxidizing agents	Coloring agent
oxidizing materials	Ethanol, 2-(phenylmethoxy)-
oxidizing materials, reducing agents	Resin
metals, oxidizing materials	Oleic acid
halogens, acids, metals, metal salts, oxidizing materials, combustible materials	Additive

Hazardous decomposition products	: (Information of components.)
oxides of carbon, water	common decomposition products
oxides of ,nitrogen and other potentiality toxic fumes.	Coloring agent
miscellaneous decomposition products.	Ethanol, 2-(phenylmethoxy)- / Oleic acid
oxides of nitrogen, hazardous gases, miscellaneous decomposition products.	Resin
crystalline silica.	Additive

11.TOXICOLOGICAL INFORMATION

(Information of components)

Acute toxicity

Ingestion LD50	100mg/kg-wild bird, 1230mg/kg-Rat >2000mg/kg >=2000mg/kg-Rat 1190mg/kg-Rat >3000mg/kg-Rat 25000mg/kg-Rat 1850mg/kg-Rat	Benzyl alcohol Coloring agent Coloring agent Ethanol, 2-(phenylmethoxy)- Resin Oleic acid Additive
Inhalation LC50	1000ppm-8H-Rat	Benzyl alcohol
Skin LD50	2000mg/kg-Rabbit >=2000mg/kg-Rat	Benzyl alcohol Coloring agent

Local effects	Irritant:skin, eye, inhalation Irritant:eye	Benzyl alcohol Ethanol, 2-(phenylmethoxy)- / Resin
---------------	--	---

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 to dusts , resulting in graphite pneumoconiosis.	Coloring agent

Signs and Symptos of overexposure and aggravated by exposure

Inhalation	irritation,nausea irritation,cough irritation,pneumonitis difficulty breathing, interfere with respiratory irritation	Benzyl alcohol Coloring agent Resin Oleic acid Additive
Skin contact	irritation,redness irritation irritation,sensitization	Benzyl alcohol Coloring agent / Oleic acid / Ethanol, 2-(phenylmethoxy)- / Additive Resin
Eye contact	irritation,redness irritation,discoloration irritation	Benzyl alcohol Coloring agent Ethanol, 2-(phenylmethoxy)- / Resin / Oleic acid / Additive
Ingestion	nausea,headache diarrhea,pneumonitis irritation,nausea	Benzyl alcohol / Ethanol, 2-(phenylmethoxy)- Resin Oleic acid

Specific effects	IARC Group 3	Resin / Additive
------------------	--------------	------------------

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) : Coloring agent

EU labeling

25%<=Xn:R20/22 : Benzyl alcohol

R20/22 : Harmful by inhalation and if swallowed.

CANADA Hazardous Products Act - Ingredient Disclosure List

1%over : Benzyl alcohol / Ethanol, 2-(phenylmethoxy)- / Oleic acid

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.