

Safety data sheet for chemical products

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: UB-155 Black (uni-ball micro DELUXE)

Manufacture's name : MITSUBISHI PENCIL CO.,LTD
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Creation Date : APRIL 19, 2001
File No. : 066101A

2. CONPOSITION/INFORMATION ON INGREDIENTS

The chemical product is a substance or a preparation: Preparation

Chemical nature:

<Component parts>	<Chemical or generic name>	<CAS No.>	<Concentration range (wt%)>
Ink	Water	7732-18-5	55-58
	Ethylene glycol	107-21-1	31-34
	Carbon black	1333-86-4	7-10
	Resin 1	Registered	1- 4
	Additive	Registered	< 2

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 or mild detergent and large amount of water until no evidence of chemical remain (at least 15-20 minutes). Get medical attention, if needed.

Eye contact:

Wash eyes immediately with large amounts of water or normal saline, occasionally lifting upper and lower lids, until no evidence of chemical remains. (at least 15-20 minutes) Get medical attention, if necessary.

Ingestion:

If swallowed, seek medical advice, and show the MSDS to the physician then.
[Ink quantity of product: about 1.75g]

5. FIRE-FIGHTING MEASURES

Fire and explosion measures : Slight fire hazard.

Extinguishing media:

Suitable : alcohol resistant foam, carbon dioxide, regular dry chemical,
water, alcohol resistant foam
Large fires : Use alcohol-resistant foam or flood with fine water spray.

Fire fighting : The Product is no flammable.
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 : Wipe off by dry cloth and wash with water.
: 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.)

strong oxidizers; phosphorus(V) sulfide; sodium hydroxide; chromium trioxide; dimethyl terephthalate + titanium butoxide; potassium permanganate; silvered copper wire; sodium peroxide; perchloric acid; strong bases; chlorosulfonic acid; oleum
<Ethylene glycol>

oxidizing materials; halogens; Bromates, chlorates, nitrate, strong oxidizers <Carbon black>
oxidizing materials; strong oxidizers <Resin 1>

Packaging materials : Not applicable.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

Engineering measures : Not required

Control parameters (Information of components.)

- OSHA : 3.5mg/m³ <Carbon black>
: 50ppm(125mg/m³)ceiling <Ethylene glycol>
- ACGIH : 3.5mg/m³ (total dust) <Carbon black>
: 100mg/m³ ceiling (particulate) <Ethylene glycol>
- DFG : 26mg/m³ (10ml/m³) DFG MAK 1 times/shift <Ethylene glycol>
- UK : 3.5mg/m³ TWA, 7mg/m³ STEL <Carbon black>
: 10mg/m³ TWA(particulate) , 60mg/m³ TWA(vapour) ,
125mg/m³ STEL(vapour) <Ethylene glycol>
- EC : 20ppm, 52mg/m³(8 hours), 40ppm, 104mg/m³(short-term) <Ethylene glycol>

Personal protective equipment : Not required

9. PHYSICAL AND CHEMICAL PROPERTIES

[] : Information of components.

Physical state and form	: Low viscous liquid.
Colour	: Black.
Odour	: None odour.
pH	: 8.7±0.7
Boiling point	: Not available. [Ethylene glycol / 197°C]
Melting point	: < -10°C
Flashpoint	: Not available. [Ethylene glycol / 111°C]
Autoignition temperature	: Not available. [Ethylene glycol / 398°C]
Explosion limits (vol %)	: Not applicable. [Lower flammable limit / 3.2 , Upper flammable limit / 15.3 <Ethylene glycol>]
Vapour density (air=1)	: Not available. [Ethylene glycol / 2.14]
Density	: 1.1±0.1
Solubility in water	: Soluble.
Evaporation rate	: Not available.
Volatile (%)	: 87-90%

10. STABILITY AND REACTIVITY

Stability	: Stability.
Hazardous reactions	: Will not occur.
Conditions to avoid	: May burn dose not ignite ready. Avoid heat, flames, sparks and other sources of ignition. Avoid contact with incompatible materials
Materials to avoid	: (Information of components.) strong oxidizers; phosphorus(V) sulfide; sodium hydroxide;chromium trioxide; dimethyl terephthalate + titanium butoxide; potassium permanganate; silvered copper wire; sodium peroxide; perchloric acid; strong bases; chlorosulfonic acid; oleum <Ethylene glycol> oxidizing materials;halogens;Bromates,chlorates,nitrate,strong oxidizers <Carbon black> oxidizing materials;strong oxidizers <Resin 1>
Hazardous decomposition products	: (Information of components.) oxides of carbon, water. < common decomposition products.> oxides of sulfur. <Carbon black>

11. TOXICOLOGICAL INFORMATION

(Information of components)

Acute toxicity

- Ingestion LD50 : >10000mg/kg-Rat <Carbon black>
 : \geq 5000mg/kg-Rat <Resin 1>
 : 1650mg/kg-Cat, 7500mg/kg-Mouse <Ethylene glycol>
 : >15000mg/kg-Rat <Additive>
- Inhalation LC50 : 10876mg/kg-Rat <Ethylene glycol>
- Skin LD50 : >3000mg/kg-Rabbit <Carbon black>
 : 9530uL/kg-Rabbit <Ethylene glycol>

Local effects

- : Irritation; Inhalation, Skin <Carbon black>
 : Irritation; Inhalation, Skin, eye <Ethylene glycol>

Chronic toxicity and long term toxicity : Central nervous system depressant. <Ethylene glycol>

Signs and Symptos of overexposure and aggravated by exposure

- Inhalation : irritation <Carbon black, Resin 1>
 : irritation, headache <Ethylene glycol>
- Skin contact : irritation <Carbon black, Resin 1>
 : irritation, redness <Ethylene glycol>
- Eye contact : irritation <Resin 1>
 : irritation, discoloration of lids <Carbon black>
 : irritation, redness <Ethylene glycol>
- Ingestion : nausea, vomiting <Ethylene 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

- International regulations : Not restricted
- UN classification number : Not applicable

15. REGULATORY INFORMATION

Regulations (Information of components)

Hazardous chemicals (OSHA HCS) <Carbon black, Ethylene glycol>

EU rabeling: 25%≤Xn;R22(R22: Harmful if swallowed.) <Ethylene glycol>

CANADA Hazardous Products Act - Ingredient Disclosure List

: 1% over <Carbon black, Ethylene glycol>

Hazard and safety information

Products are manufactured in accordance with European regulation EN71 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 : (APRIL 19, 2001). 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.