Creation Date : May 7, 2001
Revision Date : February 21, 2006

Safety data sheet for chemical products

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: UB-150 Black [uni-ball eye]

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 : May 7, 2001
Revision Date : February 21, 2006
File No. : 066117A Rev. 2.5.02.02

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%)
Water	7732-18-5	Registered	2317912	50- 80
Glycerine	56-81-5	Registered	2002895	< 10
1,2-Propanediol	57-55-6	Registered	2003380	< 10
Diethylene glycol	111-46-6	Registered	2038722	< 10
Carbon Black	1333-86-4	Registered	2156099	< 10
Resins	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)

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 product : about 2.1g]

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 : 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.)

acids, bases, oxidizing materials, metal oxides, peroxides, reducing agents	Glycerine
acids, bases, combustible materials, halo carbons, metals, metal salts, oxidizing materials, reducing agents	1,2-Propanediol
acids, bases, oxidizing materials	Diethylene glycol
oxidizing materials, halogens	Carbon Black
strong acids, alkalies, oxidizers, oxidizing materials	Resin

Packaging materials : Not applicable.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

Engineering measures : Not required.

Control parameters (Information of components.)

OSHA	3.5mg/m3 5mg/m3 TWA(respirable dust fraction), 15mg/m3 TWA(total dust)	Carbon Black Glycerine
ACGIH	3.5mg/m3(total dust) 10mg/m3 TWA	Carbon Black Glycerine
EC	3.5mg/m3	Carbon Black
DFG	44 mg/m3(10ml/m3) MAK(peak limitation category-II, 2)	Diethylene glycol
UK	150ppm(474mg/m3) TWA(total(vapor and pariclulates)), 10mg/m3 TWA(particlulates)	1,2-Propanediol

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 : 8.5±0.5
Boiling point : Not available. [Water/ 100 C]
Melting point : <-10 C
Flash point : Not applicable. [1,2-Propanediol/ 99 C]
Autoignition temperature : Not applicable. [Diethylene glycol/ 224 C]
Explosion limits : Not applicable.
[Lower flammable limit / 2.6% , Upper flammable limit / 12.5% <1,2-Propanediol>]
Density : about 1.1 / 25 C
Vapour density (air=1) : Not available. [1,2-Propanediol/ 2.60-2.62]
Solubility in water : Soluble.
Evaporation rate : Not available.
Volatile : 84-87%

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, halogens	Carbon Black
acids, bases, oxidizing materials, metal oxides, peroxides, reducing agents	Glycerine
acids, bases, combustible materials, halo carbons, metals, metal salts, oxidizing materials, reducing agents	1,2-Propanediol
acids, bases, oxidizing materials	Diethylene glycol
strong acids, alkalies, oxidizers, oxidizing materials	Resin

Hazardous decomposition products : (Information of components.)

oxides of carbon, water	common decomposition products
oxides of sulfur.	Carbon Black
corrosive acrolein.	Glycerine
oxides of nitrogen.	Resin

11.TOXICOLOGICAL INFORMATION

(Information of components)

Acute toxicity

Ingestion LD50	>10000mg/kg-Rat	Carbon Black
	4090mg/kg-Mouse	Glycerine
	20000mg/kg-Rat	1,2-Propanediol
	3300mg/kg-Cat,	Diethylene glycol
	7800mg/kg-Guinea pig	
Inhalation LC50	>570mg/m3-1H-Rat	Glycerine
Skin LD50	>3000mg/kg-Rabbit	Carbon Black
	>10000mg/kg-Rabbit	Glycerine
	20800mg/kg-Rabbit	1,2-Propanediol
	11890mg/kg-Rabbit	Diethylene glycol

Local effects	Irritant;inhalation, skin	Carbon Black
	Irritant;skin	Diethylene glycol

Chronic toxicity and long term toxicity

Respiratory disorders.	Carbon Black
Repeated or prolonged contact may cause skin sensitization.	1,2-Propanediol

Signs and Symptos of overexposure and aggravated by exposure

Inhalation	irritation	Carbon Black / Resin
	irritation,difficulty breathing	Glycerine
	nausea,headache	1,2-Propanediol
	nausea,cough	Diethylene glycol
Skin contact	irritation	Carbon Black / Resin
	irritation,redness	Glycerine / Diethylene glycol
	irritation,allergic reaction	1,2-Propanediol
Eye contact	mechanical irritation, discoloration of lids	Carbon Black
	tearing,stinging	Glycerine
	irritation,pain	1,2-Propanediol
	irritation,redness	Diethylene glycol
	irritation	Resin
Ingestion	nausea,vomiting	Glycerine / Diethylene glycol
	allergic reaction,vomiting	1,2-Propanediol

Specific effects	IARC Group 2B	Carbon Black

12. ECOLOGICAL INFORMATION

Not available.

Creation Date : May 7, 2001
Revision Date : February 21, 2006

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 / Glycerine

EU labeling

25<=Xn;R22 : Diethylene glycol

R22 : Harmful if swallowed.

CANADA Hazardous Products Act - Ingredient Disclosure List

1%over : Carbon Black / 1,2-Propanediol

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 : (February 21, 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.

Creation Date : May 7, 2001
Revision Date : February 21, 2006

Safety data sheet for chemical products

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: UB-150 Blue [uni-ball eye]

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 : May 7, 2001
Revision Date : February 21, 2006
File No. : 066118A Rev. 2.5.03.02

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%)
Water	7732-18-5	Registered	2317912	50- 80
Glycerine	56-81-5	Registered	2002895	< 10
1,2-Propanediol	57-55-6	Registered	2003380	< 10
Diethylene glycol	111-46-6	Registered	2038722	< 10
Coloring agent	Registered	Registered	Registered	< 10
Resin	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 product : about 2.1g]

Creation Date : May 7, 2001
Revision Date : February 21, 2006

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 : 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.)

acids, bases, oxidizing materials, metal oxides, peroxides, reducing agents	Glycerine
acids, bases, combustible materials, halo carbons, metals, metal salts, oxidizing materials, reducing agents	1,2-Propanediol
acids, bases, oxidizing materials	Diethylene glycol
oxidizing materials	Coloring agent / Resin

Packaging materials : Not applicable.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

Engineering measures : Not required.

Control parameters (Information of components.)

OSHA	5mg/m3 TWA(respirable dust fraction), 15mg/m3 TWA(total dust)	Glycerine
	5mg/m3(Respirable flaction), 15mg/m3(Total dust) [Nuisance Dust]	Coloring agent
ACGIH	10mg/m3 TWA	Glycerine
	10mg/m3(Nuisance particulate)	Coloring agent
EC	Not available.	
DFG	44 mg/m3(10ml/m3) MAK(peak limitation category-II, 2)	Diethylene glycol
UK	150ppm(474mg/m3) TWA(total(vapor and pariclulates)), 10mg/m3 TWA(particlulates)	1,2-Propanediol

Personal protective equipment : Not required.

9. PHYSICAL AND CHEMICAL PROPERTIES

[ ] : Information of components.

Physical state and form : Low viscous liquid.
Colour : Blue.
Odour : None odour.
pH : 8.5±0.5
Boiling point : Not available. [Water/ 100 C]
Melting point : <-10 C
Flash point : Not applicable. [1,2-Propanediol/ 99 C]
Autoignition temperature : Not applicable. [Diethylene glycol/ 224 C]
Explosion limits : Not applicable.
[Lower flammable limit / 0.026% , Upper flammable limit / 0.125% <1,2-Propanediol>]
Density : about 1.1 / 25 C
Vapour density (air=1) : Not available. [1,2-Propanediol/ 2.60-2.62]
Solubility in water : Soluble.
Evaporation rate : Not available.
Volatile : 88-91%

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, bases, oxidizing materials, metal oxides, peroxides, reducing agents	Glycerine
acids, bases, combustible materials, halo carbons, metals, metal salts, oxidizing materials, reducing agents	1,2-Propanediol
acids, bases, oxidizing materials	Diethylene glycol
oxidizing materials	Coloring agent / Resin

Hazardous decomposition products : (Information of components.)

oxides of carbon, water	common decomposition products
corrosive acrolein.	Glycerine
oxides of nitrogen.	Coloring agent

11.TOXICOLOGICAL INFORMATION

(Information of components)

Acute toxicity

Ingestion LD50	4090mg/kg-Mouse	Glycerine
	20000mg/kg-Rat	1,2-Propanediol
	3300mg/kg-Cat,	Diethylene glycol
	7800mg/kg-Guinea pig	
	>=5000mg/kg-Rat	Coloring agent
Inhalation LC50	>570mg/m3-1H-Rat	Glycerine
Skin LD50	>10000mg/kg-Rabbit	Glycerine
	20800mg/kg-Rabbit	1,2-Propanediol
	11890mg/kg-Rabbit	Diethylene glycol

Local effects	Irritant;skin	Diethylene glycol

Chronic toxicity and long term toxicity

Repeated or prolonged contact may cause skin sensitization.	1,2-Propanediol

Signs and Symptos of overexposure and aggravated by exposure

Inhalation	irritation,difficulty breathing	Glycerine
	nausea,headache	1,2-Propanediol
	nausea,cough	Diethylene glycol
	irritation	Coloring agent / Resin
Skin contact	irritation,redness	Glycerine / Diethylene glycol
	irritation,allergic reaction	1,2-Propanediol
	irritation	Resin
Eye contact	tearing,stinging	Glycerine
	irritation,pain	1,2-Propanediol
	irritation,redness	Diethylene glycol
	irritation	Coloring agent / Resin
Ingestion	nausea,vomiting	Glycerine / Diethylene glycol
	allergic reaction,vomiting	1,2-Propanediol
	gastric disturbances	Coloring agent

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.

Creation Date : May 7, 2001
Revision Date : February 21, 2006

14. TRANSPORT INFORMATION

HS Code : 960810

15. REGULATORY INFORMATION

Regulations (Information of components)

Hazardous chemicals (OSHA HCS) : Glycerine

EU labeling

25<=Xn;R22 : Diethylene glycol

R22 : Harmful if swallowed.

CANADA Hazardous Products Act - Ingredient Disclosure List

1%over : 1,2-Propanediol

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 : (February 21, 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.

Creation Date : May 7, 2001
Revision Date : February 21, 2006

Safety data sheet for chemical products

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: UB-150 Red [uni-ball eye]

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 : May 7, 2001
Revision Date : February 21, 2006
File No. : 066119A Rev. 2.5.03.02

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%)
Water	7732-18-5	Registered	2317912	50- 80
Glycerine	56-81-5	Registered	2002895	< 10
1,2-Propanediol	57-55-6	Registered	2003380	< 10
Diethylene glycol	111-46-6	Registered	2038722	< 10
Coloring agent	Registered	Registered	Registered	< 10
Resin	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 product : about 2.1g]

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 : 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.)

acids, bases, oxidizing materials, metal oxides, peroxides, reducing agents	Glycerine
acids, bases, combustible materials, halo carbons, metals, metal salts, oxidizing materials, reducing agents	1,2-Propanediol
acids, bases, oxidizing materials	Diethylene glycol
oxidizing materials	Coloring agent / Resin

Packaging materials : Not applicable.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

Engineering measures : Not required.

Control parameters (Information of components.)

OSHA	5mg/m3 TWA(respirable dust fraction), 15mg/m3 TWA(total dust)	Glycerine
ACGIH	10mg/m3 TWA	Glycerine
EC	Not available.	
JAIH	2mg/m3(Respirable fraction), 8mg/m3(Total dust)	Coloring agent
DFG	44 mg/m3(10ml/m3) MAK(peak limitation category-II, 2)	Diethylene glycol
UK	150ppm(474mg/m3) TWA(total(vapor and pariclulates)), 10mg/m3 TWA(particlulates)	1,2-Propanediol

Personal protective equipment : Not required.

9. PHYSICAL AND CHEMICAL PROPERTIES

[ ] : Information of components.

Physical state and form : Low viscous liquid.
Colour : Red.
Odour : None odour.
pH : 8.5±0.5
Boiling point : Not available. [Water/ 100 C]
Melting point : <-10 C
Flash point : Not applicable. [1,2-Propanediol/ 99 C]
Autoignition temperature : Not applicable. [Diethylene glycol/ 224 C]
Explosion limits : Not applicable.
[Lower flammable limit / 2.6% , Upper flammable limit / 12.5% <1,2-Propanediol>]
Density : about 1.1 / 25 C
Vapour density (air=1) : Not available. [1,2-Propanediol/ 2.60-2.62]
Solubility in water : Soluble.
Evaporation rate : Not available.
Volatile : 88-91%

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, bases, oxidizing materials, metal oxides, peroxides, reducing agents	Glycerine
acids, bases, combustible materials, halo carbons, metals, metal salts, oxidizing materials, reducing agents	1,2-Propanediol
acids, bases, oxidizing materials	Diethylene glycol
oxidizing materials	Coloring agent / Resin

Hazardous decomposition products : (Information of components.)

oxides of carbon, water	common decomposition products
corrosive acrolein.	Glycerine
oxides of nitrogen.	Coloring agent

11.TOXICOLOGICAL INFORMATION

(Information of components)

Acute toxicity

Ingestion LD50	4090mg/kg-Mouse	Glycerine
	20000mg/kg-Rat	1,2-Propanediol
	3300mg/kg-Cat, 7800mg/kg-Guinea pig	Diethylene glycol
	>=5000mg/kg-Rat	Coloring agent
Inhalation LC50	>570mg/m3-1H-Rat	Glycerine
Skin LD50	>10000mg/kg-Rabbit	Glycerine
	20800mg/kg-Rabbit	1,2-Propanediol
	11890mg/kg-Rabbit	Diethylene glycol

Local effects	Irritant;skin	Diethylene glycol

Chronic toxicity and long term toxicity

Repeated or prolonged contact may cause skin sensitization.	1,2-Propanediol

Signs and Symptos of overexposure and aggravated by exposure

Inhalation	irritation,difficulty breathing	Glycerine
	nausea,headache	1,2-Propanediol
	nausea,cough	Diethylene glycol
	irritation	Coloring agent / Resin
Skin contact	irritation,redness	Glycerine / Diethylene glycol
	irritation,allergic reaction	1,2-Propanediol
	redness,swelling	Coloring agent
	irritation	Resin
Eye contact	tearing,stinging	Glycerine
	irritation,pain	1,2-Propanediol
	irritation,redness	Diethylene glycol
	irritation	Resin
Ingestion	nausea,vomiting	Glycerine / Diethylene glycol / Coloring agent
	allergic reaction,vomiting	1,2-Propanediol

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.

Creation Date : May 7, 2001
Revision Date : February 21, 2006

14. TRANSPORT INFORMATION

HS Code : 960810

15. REGULATORY INFORMATION

Regulations (Information of components)

Hazardous chemicals (OSHA HCS) : Glycerine

EU labeling

25<=Xn;R22 : Diethylene glycol

R22 : Harmful if swallowed.

CANADA Hazardous Products Act - Ingredient Disclosure List

1%over : 1,2-Propanediol

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 : (February 21, 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.

Creation Date : May 2, 2001
Revision Date : February 16, 2006

Safety data sheet for chemical products

1. PRODUCT AND COMPANY IDENTIFICATION

Product name: UB-150 Green [uni-ball eye]

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 : May 7, 2001
Revision Date : February 21, 2006
File No. : 066120A Rev. 2.5.02.02

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%)
Water	7732-18-5	Registered	2317912	50- 80
Glycerine	56-81-5	Registered	2002895	10- 30
Triethanolamine	102-71-6	Registered	2030498	< 10
Resin	Registered	Registered	Polymer	< 10
Coloring agents	Registered	Registered	Registered	< 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 product : about 2.1g]

Creation Date : May 2, 2001
Revision Date : February 16, 2006

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 : The Products 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.)

acids, bases, oxidizing materials, metal oxides, peroxides, reducing agents	Glycerine
acids, metals, oxidizing materials	Triethanolamine
oxidizing materials, reducing agents	Coloring agent

Packaging materials : Not applicable.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

Engineering measures : Not required.

Control parameters (Information of components.)

OSHA	5mg/m3 TWA(respirable dust fraction), 15mg/m3 TWA(total dust)	Glycerine
ACGIH	10mg/m3 TWA 5mg/m3 TWA	Glycerine Triethanolamine
EC	Not available.	

Personal protective equipment : Not required.

9. PHYSICAL AND CHEMICAL PROPERTIES

[ ] : Information of components.

Physical state and form	: Low viscous liquid.
Colour	: Green.
Odour	: None odour.
pH	: 8.7±0.2
Boiling point	: Not available. [Water/ 100 C]
Melting point	: <-10 C
Flash point	: Not applicable. [Glycerine/ 160 C]
Autoignition temperature	: Not applicable. [Triethanolamine/ 315.5 C]
Explosion limits	: Not applicable. [Lower flammable limit / 0.9% <Glycerine>]
Density	: about 1.1 / 25 C
Vapour density (air=1)	: Not available.
Solubulity in water	: Soluble.
Evaporation rate	: Not available.
Volatile	: 85-88%

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, bases, oxidizing materials, metal oxides, peroxides, reducing agents	Glycerine
acids, metals, oxidizing materials	Triethanolamine
oxidizing materials, reducing agents	Coloring agent

Hazardous decomposition products : (Information of components.)

oxides of carbon, water	common decomposition products
corrosive acrolein.	Glycerine
oxides of nitrogen.	Triethanolamine
oxides of nitrogen, sulfur, sodium.	Coloring agent

11.TOXICOLOGICAL INFORMATION

(Information of components)

Acute toxicity

Ingestion LD50	4090mg/kg-Mouse	Glycerine
	2200mg/kg-Rabbit, 5846mg/kg-Mouse	Triethanolamine
	>2000mg/kg-Rat	Coloring agent
Inhalation LC50	>570mg/m3-1H-Rat	Glycerine
Skin LD50	>10000mg/kg-Rabbit	Glycerine
	>16mL/kg-Rat	Triethanolamine

Local effects	Irritant;skin, eye	Triethanolamine

Chronic toxicity and long term toxicity

Repeated or prolonged contact may cause skin sensitization.	Triethanolamine

Signs and Symptos of overexposure and aggravated by exposure

Inhalation	irritation,difficulty breathing	Glycerine
	sore throat,difficulty breathing	Triethanolamine
	irritation,headache	Resin
	irritation,chest pain	Coloring agent
Skin contact	irritation,redness	Glycerine / Triethanolamine
	irritation	Resin
	irritation,pain	Coloring agent
Eye contact	tearing,stinging	Glycerine
	irritation,corneal swelling	Triethanolamine
	irritation	Resin
	mechanical irritation,pain	Coloring agent
Ingestion	nausea,vomiting	Glycerine
	burns,gastrointestinal irritation	Triethanolamine
	poorly absorbed from the	Coloring agent

Specific effects	IARC Group 3	Triethanolamine / Coloring agent

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

Creation Date : May 2, 2001
Revision Date : February 16, 2006

15. REGULATORY INFORMATION

Regulations (Information of components)

Hazardous chemicals (OSHA HCS) : Glycerine / Triethanolamine

EU labeling : Not restricted.

CANADA Hazardous Products Act - Ingredient Disclosure List

1%over : Triethanolamine

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 : (February 16, 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.