

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

Creation Date : May 7, 2001
Revision Date : November 15, 2011
File No. : 066117A Rev. 2.5.02.04

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.

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 : 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/m ³ 5mg/m ³ TWA(respirable dust fraction), 15mg/m ³ TWA(total dust)	Carbon Black Glycerine
ACGIH	3.5mg/m ³ (total dust) 10mg/m ³ TWA	Carbon Black Glycerine
EC	3.5mg/m ³	Carbon Black
DFG	44 mg/m ³ (10ml/m ³) MAK(peak limitation category-II, 2)	Diethylene glycol
UK	150ppm(474mg/m ³) TWA(total(vapor and pariculates)), 10mg/m ³ TWA(particulates)	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.)	common decomposition products
oxides of carbon, water		Carbon Black
oxides of sulfur.		Glycerine
corrosive acrolein.		Resin
oxides of nitrogen.		

11. TOXICOLOGICAL INFORMATION

(Information of components)

Acute toxicity

Ingestion LD50	>10000mg/kg-Rat 4090mg/kg-Mouse 20000mg/kg-Rat 3300mg/kg-Cat, 7800mg/kg-Guinea pig	Carbon Black Glycerine 1,2-Propanediol Diethylene glycol
Inhalation LC50	>570mg/m ³ -1H-Rat	Glycerine
Skin LD50	>3000mg/kg-Rabbit >10000mg/kg-Rabbit 20800mg/kg-Rabbit 11890mg/kg-Rabbit	Carbon Black Glycerine 1,2-Propanediol Diethylene glycol

Local effects	Irritant:inhalation, skin Irritant:skin	Carbon Black Diethylene glycol
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Chronic toxicity and long term toxicity

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

Signs and Symptoms of overexposure and aggravated by exposure

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

Specific effects	IARC Group 2B	Carbon Black
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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) : 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 ISO 8124-3 " Safety of Toys - 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 : (November 15, 2011). 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

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

Creation Date : May 7, 2001
 Revision Date : November 15, 2011
 File No. : 066118A Rev. 2.5.03.04

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.

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 : 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 oxidizing materials	Diethylene glycol Coloring agent / Resin
- Packaging materials : Not applicable.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

Engineering measures : Not required.

Control parameters (Information of components.)

OSHA	5mg/m ³ TWA(respirable dust fraction), 15mg/m ³ TWA(total dust) 5mg/m ³ (Respirable flaction), 15mg/m ³ (Total dust) [Nuisance Dust]	Glycerine Coloring agent
ACGIH	10mg/m ³ TWA 10mg/m ³ (Nuisance particulate)	Glycerine Coloring agent
EC	Not available.	

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 oxidizing materials	Diethylene glycol 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 20000mg/kg-Rat 3300mg/kg-Cat, 7800mg/kg-Guinea pig >=5000mg/kg-Rat	Glycerine 1,2-Propanediol Diethylene glycol Coloring agent
Inhalation LC50	>570mg/m ³ -1H-Rat	Glycerine
Skin LD50	>10000mg/kg-Rabbit 20800mg/kg-Rabbit 11890mg/kg-Rabbit	Glycerine 1,2-Propanediol 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 nausea,headache nausea,cough irritation	Glycerine 1,2-Propanediol Diethylene glycol Coloring agent / Resin
Skin contact	irritation,redness irritation,allergic reaction irritation	Glycerine / Diethylene glycol 1,2-Propanediol Resin
Eye contact	tearing,stinging irritation,pain irritation,redness irritation	Glycerine 1,2-Propanediol Diethylene glycol Coloring agent / Resin
Ingestion	nausea,vomiting allergic reaction,vomiting gastric disturbances	Glycerine / Diethylene glycol 1,2-Propanediol 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.

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 ISO 8124-3 " Safety of Toys - 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 : (November 15, 2011). 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

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

Creation Date : May 7, 2001
Revision Date : November 15, 2011
File No. : 066119A Rev. 2.5.04.04

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.

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 : 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 oxidizing materials	Diethylene glycol Coloring agent / Resin

Packaging materials : Not applicable.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

Engineering measures : Not required.

Control parameters (Information of components.)

OSHA	5mg/m ³ TWA(respirable dust fraction), 15mg/m ³ TWA(total dust)	Glycerine
ACGIH	10mg/m ³ TWA	Glycerine
EC	Not available.	

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 20000mg/kg-Rat 3300mg/kg-Cat, 7800mg/kg-Guinea pig >=5000mg/kg-Rat	Glycerine 1,2-Propanediol Diethylene glycol Coloring agent
Inhalation LC50	>570mg/m ³ -1H-Rat	Glycerine
Skin LD50	>10000mg/kg-Rabbit 20800mg/kg-Rabbit 11890mg/kg-Rabbit	Glycerine 1,2-Propanediol 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 nausea,headache nausea,cough irritation	Glycerine 1,2-Propanediol Diethylene glycol Coloring agent / Resin
Skin contact	irritation,redness irritation,allergic reaction redness,swelling irritation	Glycerine / Diethylene glycol 1,2-Propanediol Coloring agent Resin
Eye contact	tearing,stinging irritation,pain irritation,redness irritation	Glycerine 1,2-Propanediol Diethylene glycol Resin
Ingestion	nausea,vomiting allergic reaction,vomiting	Glycerine / Diethylene glycol / Coloring agent 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.

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 ISO 8124-3 " Safety of Toys - 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 : (November 15, 2011). 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

Product name: UB-157 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

Creation Date : May 7, 2001
Revision Date : November 15, 2011
File No. : 066120A Rev. 2.5.04.04

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
1,2-Propanediol	57-55-6	Registered	2003380	< 10
Triethanolamine	102-71-6	Registered	2030498	< 10
Coloring agent	Registered	Registered	Registered	< 10
Resin	Registered	Registered	Registered	< 10
Additive	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]

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 : 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, Glycerine
reducing agents

acids, bases, combustible materials, halo carbons, metals, 1,2-Propanediol
metal salts, oxidizing materials, reducing agents

acids, metals, oxidizing materials Triethanolamine
oxidizing materials Coloring agent

oxidizing materials, reducing agents Additive

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) 15mg/m3 PEL (Nuisance Dust)	Glycerine Coloring agent
ACGIH	10mg/m3 TWA 5mg/m3 TWA 10mg/m3(Nuisance particulate)	Glycerine Triethanolamine Coloring agent
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	: about 8.7
Boiling point	: Not available. [Water/ 100 C]
Melting point	: <-10 C
Flash point	: Not applicable. [1,2-Propanediol/ 99 C(CC)]
Autoignition temperature	: Not applicable. [Triethanolamine/ 315.5 C]
Explosion limits	: Not applicable. [Lower flammable limit / 2.6% , Upper flammable limit / 12.5% <1,2-Propanediol>]
Density	: 1.05-1.10 / 25 C
Vapour density (air=1)	: Not available. [1,2-Propanediol/ 2.60-2.62]
Solubility in water	: Soluble.
Evaporation rate	: Not available.
Volatile	: 84-86%

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, metals, oxidizing materials	Triethanolamine
oxidizing materials	Coloring agent
oxidizing materials, reducing agents	Additive

Hazardous decomposition products	: (Information of components.)
oxides of carbon, water	common decomposition products
oxides of nitrogen.	Triethanolamine
cyanide, oxides of nitrogen.	Coloring agent
oxides of nitrogen, hydrogen cyanide.	Additive

11. TOXICOLOGICAL INFORMATION

(Information of components)

Acute toxicity

Ingestion LD50	4090mg/kg-Mouse 20000mg/kg-Rat 2200mg/kg-Rabbit 5846mg/kg-Mouse >=5000mg/kg-Rat 1040mg/kg-Rabbit, >40000mg/kg-Mouse	Glycerine 1,2-Propanediol Triethanolamine Coloring agent Additive
Inhalation LC50	>570mg/m ³ 1H-Rat	Glycerine
Skin LD50	>10000mg/kg-Rabbit 20800mg/kg-Rabbit >16mL/kg-Rat	Glycerine 1,2-Propanediol Triethanolamine

Local effects Irritant:skin, eye Triethanolamine

Chronic toxicity and long term toxicity

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

Signs and Symptos of overexposure and aggravated by exposure

Inhalation	irritation,difficulty breathing nausea,headache sore throat,difficulty breathing irritation irritation,pneumonitis	Glycerine 1,2-Propanediol Triethanolamine Coloring agent Additive
Skin contact	irritation,redness irritation,allergic reaction irritation irritation,sensitization	Glycerine / Triethanolamine 1,2-Propanediol Coloring agent Additive
Eye contact	tearing,stinging irritation,pain irritation,corneal swelling irritation	Glycerine 1,2-Propanediol Triethanolamine Coloring agent / Additive
Ingestion	nausea,vomiting allergic reaction,vomiting burns,gastrointestinal irritation gastric disturbances diarrhea,pneumonitis	Glycerine 1,2-Propanediol Triethanolamine Coloring agent Additive

Specific effects IARC Group 3 Triethanolamine / 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) : Glycerine / Triethanolamine

EU labeling : Not restricted.

CANADA Hazardous Products Act - Ingredient Disclosure List

1%over : 1,2-Propanediol / Triethanolamine

Hazard and safety information

Products are manufactured in accordance with ISO 8124-3 " Safety of Toys - 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 : (November 15, 2011). 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.