1. Product and Company Identification

[Product name] UB-150 Black

[File No.] 300035E [Date of issue] 2014/11/05

[Details of Manufacture]

Manufacture's name: MITSUBISHI PENCIL CO., LTD.

Address: 5-23-37, HIGASHIOHI, SHINAGAWA, TOKYO, JAPAN 03-3458-6281

Telephone number: (Only office hour are available.)

03-3450-0363 telefax number:

2. Hazards identification

Information of this section is about the ink.

[Classification of the substance or mixture]

PHYSICO-CHEMICAL HAZARDS

Not applicable.

HEALTH HAZARDS

: Not classified Acute toxicity(oral) Acute toxicity(skin) : Not classified Acute toxicity(inhalation steam) : Not classified

Skin corrosion/irritation : Classification not possible Serious eye damage/Eye Irritation : Classification not possible Respiratory sensitizer Classification not possible Skin sensitizer : Classification not possible Germ cell mutagenicity : Classification not possible

Carcinogenicity : Category2 Toxic to reproduction : Category2

Specific target organ systemic toxicity(single exposure) : Classification not possible

Specific target organ systemic toxicity(repeated exposure) : Category1 Aspiration hazard : Not classified

ENVIRONMENTAL HAZARDS

Hazard to the Aquatic Environment (Acute) : Classification not possible Hazard to the Aquatic Environment (Chronic) : Classification not possible

[Label elements]

Pictogram



Signal Word Danger

Hazard Statement : Suspected of causing cancer

Suspected of damaging fertility or the unborn child

: Causes damage to organs through prolonged or repeated exposure

Precautionary Statement

: Do not breathe dust/vapours etc..

: Do not eat, drink or smoke when using this product.

: Use personal protective equipment as required. (Refer to Section 8)

: Get medical advice/attention if you feel unwell.

: IF exposed or concerned: Get medical advice/attention.

: Dispose in accordance with all current regulations and standards.

[Other hazards] No information available.

3. Composition/information on ingredients

[The chemical product is a substance or a mixture] Mixture

[Chemical nature] [Component parts] Ink[Ink quantity of product :about 2.1g]

Chemical name Cas No. Concentration range(wt%)

 Water
 7732-18-5
 50-80

 Additive
 Trade secret
 10-30

 Carbon black
 1333-86-4
 <10</td>

 Resin
 Trade secret
 <10</td>

4. First aid measures

[Description of first aid measures]

Eye contact : Flush eyes with plenty of water for at least 15 minutes.

: Take off the contact lens if possible

Consult medical advice depending on the symptoms.

Skin contact : Wash skin.

: Consult medical advice depending on the symptoms.

: Thoroughly clean and dry contaminated clothing and shoes before reuse.

Ingestion : Rinse mouth, give plenty of water to dilute. No specific intervention is indicated

as compound is not likely to be hazardous by ingestion.

: Consult medical advice depending on the symptoms.

Inhalation : Due to its low vapor pressure inhalation is unlikely at room temperature.

: If not feeling well, move to an area of fresh air and rest.

: Consult medical advice depending on the symptoms.

[Most important symptoms and effects, both acute and delayed]

No information available.

[Indication of any immediate medical attention and special treatment needed]

No information available.

5. Firefighting measures

[Extinguishing media] Regular dry chemical, carbon dioxide, water, regular foam

[Special hazards arising from the substance or mixture]

No further relevant information available.

[Advice for firefighters] Stay upwind and keep out of low areas and avoid inhalation of material or

combustion by-products.

[Personal precautions, protective equipment and emergency procedures]

Rope off the area to contain the leak and prohibit entrance except for

authorized persons.

Wear appropriate protection gear.

Do not work in windward direction.

[Environmental precautions] Collect leaked material in empty container after leading outflow to a safe area

containing earth and sand.

Do not allow leaked material to pollute rivers, lakes, etc.

[Methods and material for containment and cleaning up]

Wipe off by dry cloth and wash with water.

Dispose of pollution or waste in accordance with national, state and local

regulations.

[Reference to other sections] No information available.

7. Handling and storage

[Precautions for safe handling]

Do not lick or swallow the ink.

Avoid contact with skin and eyes.

Recap after use (if there is a cap), and keep out of the reach of infants.

Don't shake.

[Conditions for safe storage, including any incompatibilities]

Keep away from oxidizing materials, ignition sources, high temperature and

direct sunlight.

Recommended temperature : 0-40°C

[Specific end use(s)] No information available.

8. Exposure controls/personal protection

[Control parameters]

Chemical name OSHA ACGIH
Carbon black - (TWA)3.5mg/m3

[Exposure controls]

Protective equipment : Not required.

Respiratory protection : Not required.

Hands protection : Not required.

Eye protection : Not required.

Skin protection : Not required.

9. Physical and chemical properties

[Imformation on basic physical and chemical properties]

Color : Black
State : Liquid
Odor : slight odor
pH : about 8.5

Boiling point : No information available.[Water 100°C]

Melting point : No information available.

Flash point : No information available.[Additive 99°C]

Autoignition temperature : No information available.[Additive 365°C]

Explosion limits : No information available.

Vapor density(air=1) : No information available.

Density : about 1.1

Solubility in water : No information available. Evaporation rate : No information available.

Volatile : >80%

[Other information] No information available.

10. Stability and reactivity

[Chemical stability] This mixture is stable in normal temperature, a condition of the pressure.

[Reactivity] No data available.

[Conditions to avoid] Avoid heat, flames, sparks and other sources of ignition.

Avoid direct sunlight and high temperature.

[Incompatible materials] No information available.

[Hazardous decomposition products] No information available.

[Possibility of hazardous reactions] No information available.

11. Toxicological information

[Information on toxicological effects]

Acute toxicity(oral)

Not classified : >2000 mg/kg (estimate value)

Acute toxicity(skin)

Not classified : >2000 mg/kg (estimate value)

Acute toxicity(inhalation:vapours)

Not classified : >20 mg/L (estimate value)

Skin corrosion/irritation

No information available.

Serious eye damage/Eye Irritation

No information available.

Respiratory sensitizer

No information available.

Skin sensitizer

No information available.

Germ cell mutagenicity

No information available.

Carcinogenicity

Carbon black : Category2

Toxic to reproduction

Additive : Category2

Specific target organ systemic toxicity(single exposure)

No information available.

Specific target organ systemic toxicity(repeated exposure)

Carbon black : Category1
Additive : Category1

Aspiration hazard

No information available.

Hazard to the Aquatic Environment (Acute)

No information available.

Hazard to the Aquatic Environment (Chronic)

No information available.

12. Ecological information

No information available.

13. Disposal considerations

[Waste treatment methods]

Dispose in accordance with all current regulations and standards.

Do not allow it to flow into the drainages with waste fluid.

14. Transport information

[Environmental hazards] No information available.

[HS Code] 960810

[Special precautions for user] Check the container for any leakage. Load a cargo without a dropping or

incurring damage, and take causion against collapse of container.

15. Regulatory information

TSCA: Listed on the TSCA inventory or polymer substance.

[Chemical safety assessment]

Ink or lead are manufactured in accordance with ISO 8124-3 "Safety of Toys - Part 3"

- The information is based on our present knowledge at the date of its publication, and designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release.
- This shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

1. Product and Company Identification

[Product name] UB-150 Red

[File No.] 300037E [Date of issue] 2014/11/05

[Details of Manufacture]

Manufacture's name: MITSUBISHI PENCIL CO., LTD.

Address: 5-23-37, HIGASHIOHI, SHINAGAWA, TOKYO, JAPAN 03-3458-6281

Telephone number: (Only office hour are available.)

03-3450-0363 telefax number:

2. Hazards identification

Information of this section is about the ink.

[Classification of the substance or mixture]

PHYSICO-CHEMICAL HAZARDS

Not applicable.

HEALTH HAZARDS

: Not classified Acute toxicity(oral) Acute toxicity(skin) : Not classified Acute toxicity(inhalation steam) : Not classified

Skin corrosion/irritation : Classification not possible Serious eye damage/Eye Irritation : Classification not possible Respiratory sensitizer Classification not possible Skin sensitizer : Classification not possible Germ cell mutagenicity : Classification not possible Carcinogenicity : Classification not possible

Toxic to reproduction : Category2

: Classification not possible Specific target organ systemic toxicity(single exposure)

Specific target organ systemic toxicity(repeated exposure) : Category1 Aspiration hazard : Not classified

ENVIRONMENTAL HAZARDS

Hazard to the Aquatic Environment (Acute) : Classification not possible Hazard to the Aquatic Environment (Chronic) : Classification not possible

[Label elements]

Pictogram



Signal Word Danger

Hazard Statement : Suspected of damaging fertility or the unborn child

Causes damage to organs through prolonged or repeated exposure

Precautionary Statement

: Do not breathe dust/vapours etc..

: Do not eat, drink or smoke when using this product.

: Use personal protective equipment as required. (Refer to Section 8)

Get medical advice/attention if you feel unwell.

: IF exposed or concerned: Get medical advice/attention.

: Dispose in accordance with all current regulations and standards.

[Other hazards] No information available.

3. Composition/information on ingredients

[The chemical product is a substance or a mixture]		Mixture
[Chemical nature]	[Component parts]	Ink[Ink quantity of product :about 2.1g]
Chemical name	Cas No.	Concentration range(wt%)
Water	7732-18-5	50-80
Additive	Trade secret	10-30
Coloring agent	Trade secret	<10
Resin	Trade secret	<10

4. First aid measures

[Description of first aid measures]

Eye contact : Flush eyes with plenty of water for at least 15 minutes.

: Take off the contact lens if possible

: Consult medical advice depending on the symptoms.

Skin contact : Wash skin.

: Consult medical advice depending on the symptoms.

: Thoroughly clean and dry contaminated clothing and shoes before reuse.

Ingestion : Rinse mouth, give plenty of water to dilute. No specific intervention is indicated

as compound is not likely to be hazardous by ingestion.

: Consult medical advice depending on the symptoms.

Inhalation : Due to its low vapor pressure inhalation is unlikely at room temperature.

: If not feeling well, move to an area of fresh air and rest.

: Consult medical advice depending on the symptoms.

[Most important symptoms and effects, both acute and delayed]

No information available.

[Indication of any immediate medical attention and special treatment needed]

No information available.

5. Firefighting measures

[Extinguishing media] Regular dry chemical, carbon dioxide, water, regular foam

[Special hazards arising from the substance or mixture]

No further relevant information available.

[Advice for firefighters] Stay upwind and keep out of low areas and avoid inhalation of material or

combustion by-products.

[Personal precautions, protective equipment and emergency procedures]

Rope off the area to contain the leak and prohibit entrance except for

authorized persons.

Wear appropriate protection gear.

Do not work in windward direction.

[Environmental precautions] Collect leaked material in empty container after leading outflow to a safe area

containing earth and sand.

Do not allow leaked material to pollute rivers, lakes, etc.

[Methods and material for containment and cleaning up]

Wipe off by dry cloth and wash with water.

Dispose of pollution or waste in accordance with national, state and local

regulations.

[Reference to other sections] No information available.

7. Handling and storage

[Precautions for safe handling]

Do not lick or swallow the ink.

Avoid contact with skin and eyes.

Recap after use (if there is a cap), and keep out of the reach of infants.

Don't shake.

[Conditions for safe storage, including any incompatibilities]

Keep away from oxidizing materials, ignition sources, high temperature and

direct sunlight.

Recommended temperature : 0-40°C

[Specific end use(s)] No information available.

8. Exposure controls/personal protection

[Exposure controls]

Protective equipment : Not required.

Respiratory protection : Not required.

Hands protection : Not required.

Eye protection : Not required.

Skin protection : Not required.

9. Physical and chemical properties

[Imformation on basic physical and chemical properties]

Color : Red
State : Liquid
Odor : slight odor
pH : about 8.5

Boiling point : No information available.[Water 100°C]

Melting point : No information available.

Flash point : No information available.[Additive 99°C]
Autoignition temperature : No information available.[Additive 365°C]

Explosion limits : No information available.

Vapor density(air=1) : No information available.

Density : about 1.1

Solubility in water : No information available. Evaporation rate : No information available.

Volatile : >80%

[Other information] No information available.

10. Stability and reactivity

[Chemical stability] This mixture is stable in normal temperature, a condition of the pressure.

[Reactivity] No data available.

[Conditions to avoid] Avoid heat, flames, sparks and other sources of ignition.

Avoid direct sunlight and high temperature.

[Incompatible materials] No information available.

[Hazardous decomposition products] No information available.

[Possibility of hazardous reactions] No information available.

11. Toxicological information

[Information on toxicological effects]

Acute toxicity(oral)

Not classified : >2000 mg/kg (estimate value)

Acute toxicity(skin)

Not classified : >2000 mg/kg (estimate value)

Acute toxicity(inhalation:vapours)

Not classified : >20 mg/L (estimate value)

Skin corrosion/irritation

No information available.

Serious eye damage/Eye Irritation

No information available.

Respiratory sensitizer

No information available.

Skin sensitizer

No information available.

Germ cell mutagenicity

No information available.

Carcinogenicity

No information available.

Toxic to reproduction

Additive : Category2

Specific target organ systemic toxicity(single exposure)

No information available.

Specific target organ systemic toxicity(repeated exposure)

Additive : Category1

Aspiration hazard

No information available.

Hazard to the Aquatic Environment (Acute)

No information available.

Hazard to the Aquatic Environment (Chronic)

No information available.

12. Ecological information

No information available.

13. Disposal considerations

[Waste treatment methods]

Dispose in accordance with all current regulations and standards.

Do not allow it to flow into the drainages with waste fluid.

14. Transport information

[Environmental hazards] No information available.

[HS Code] 960810

[Special precautions for user] Check the container for any leakage. Load a cargo without a dropping or

incurring damage, and take causion against collapse of container.

15. Regulatory information

TSCA: Listed on the TSCA inventory or polymer substance.

[Chemical safety assessment]

Ink or lead are manufactured in accordance with ISO 8124-3 "Safety of Toys - Part 3"

- The information is based on our present knowledge at the date of its publication, and designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release.
- This shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

1. Product and Company Identification

[Product name] UB-150 Blue

[File No.] 300036E [Date of issue] 2014/11/05

[Details of Manufacture]

Manufacture's name: MITSUBISHI PENCIL CO., LTD.

Address: 5-23-37, HIGASHIOHI, SHINAGAWA, TOKYO, JAPAN

Telephone number: (Only office hour are available.)

03-3458-6281

03-3450-0363 telefax number:

2. Hazards identification

Information of this section is about the ink.

[Classification of the substance or mixture]

PHYSICO-CHEMICAL HAZARDS

Not applicable.

HEALTH HAZARDS

: Not classified Acute toxicity(oral) Acute toxicity(skin) : Not classified Acute toxicity(inhalation steam) : Not classified

Skin corrosion/irritation : Classification not possible Serious eye damage/Eye Irritation : Classification not possible Respiratory sensitizer Classification not possible Skin sensitizer : Classification not possible Germ cell mutagenicity : Classification not possible Carcinogenicity : Classification not possible

Toxic to reproduction : Category2

: Classification not possible Specific target organ systemic toxicity(single exposure)

Specific target organ systemic toxicity(repeated exposure) : Category1 Aspiration hazard : Not classified

ENVIRONMENTAL HAZARDS

Hazard to the Aquatic Environment (Acute) : Classification not possible Hazard to the Aquatic Environment (Chronic) : Classification not possible

[Label elements]

Pictogram



Signal Word Danger

Hazard Statement : Suspected of damaging fertility or the unborn child

Causes damage to organs through prolonged or repeated exposure

Precautionary Statement

: Do not breathe dust/vapours etc..

: Do not eat, drink or smoke when using this product.

: Use personal protective equipment as required. (Refer to Section 8)

Get medical advice/attention if you feel unwell.

: IF exposed or concerned: Get medical advice/attention.

: Dispose in accordance with all current regulations and standards.

[Other hazards] No information available.

3. Composition/information on ingredients

[The chemical product is a substance or a mixture]		Mixture
[Chemical nature]	[Component parts]	Ink[Ink quantity of product :about 2.1g]
Chemical name	Cas No.	Concentration range(wt%)
Water	7732-18-5	50-80
Additive	Trade secret	10-30
Coloring agent	Trade secret	<10
Resin	Trade secret	<10

4. First aid measures

[Description of first aid measures]

Eye contact : Flush eyes with plenty of water for at least 15 minutes.

: Take off the contact lens if possible

: Consult medical advice depending on the symptoms.

Skin contact : Wash skin.

: Consult medical advice depending on the symptoms.

: Thoroughly clean and dry contaminated clothing and shoes before reuse.

Ingestion : Rinse mouth, give plenty of water to dilute. No specific intervention is indicated

as compound is not likely to be hazardous by ingestion.

: Consult medical advice depending on the symptoms.

Inhalation : Due to its low vapor pressure inhalation is unlikely at room temperature.

: If not feeling well, move to an area of fresh air and rest.

: Consult medical advice depending on the symptoms.

[Most important symptoms and effects, both acute and delayed]

No information available.

[Indication of any immediate medical attention and special treatment needed]

No information available.

5. Firefighting measures

[Extinguishing media] Regular dry chemical, carbon dioxide, water, regular foam

[Special hazards arising from the substance or mixture]

No further relevant information available.

[Advice for firefighters] Stay upwind and keep out of low areas and avoid inhalation of material or

combustion by-products.

[Personal precautions, protective equipment and emergency procedures]

Rope off the area to contain the leak and prohibit entrance except for

authorized persons.

Wear appropriate protection gear.

Do not work in windward direction.

[Environmental precautions] Collect leaked material in empty container after leading outflow to a safe area

containing earth and sand.

Do not allow leaked material to pollute rivers, lakes, etc.

[Methods and material for containment and cleaning up]

Wipe off by dry cloth and wash with water.

Dispose of pollution or waste in accordance with national, state and local

regulations.

[Reference to other sections] No information available.

7. Handling and storage

[Precautions for safe handling]

Do not lick or swallow the ink.

Avoid contact with skin and eyes.

Recap after use (if there is a cap), and keep out of the reach of infants.

Don't shake.

[Conditions for safe storage, including any incompatibilities]

Keep away from oxidizing materials, ignition sources, high temperature and

direct sunlight.

Recommended temperature : 0-40°C

[Specific end use(s)] No information available.

8. Exposure controls/personal protection

[Exposure controls]

Protective equipment : Not required.

Respiratory protection : Not required.

Hands protection : Not required.

Eye protection : Not required.

Skin protection : Not required.

9. Physical and chemical properties

[Imformation on basic physical and chemical properties]

Color : Blue
State : Liquid
Odor : slight odor
pH : about 8.5

Boiling point : No information available.[Water 100°C]

Melting point : No information available.

Flash point : No information available.[Additive 99°C]
Autoignition temperature : No information available.[Additive 365°C]

Explosion limits : No information available.

Vapor density(air=1) : No information available.

Density : about 1.1

Solubility in water : No information available. Evaporation rate : No information available.

Volatile : >80%

[Other information] No information available.

10. Stability and reactivity

[Chemical stability] This mixture is stable in normal temperature, a condition of the pressure.

[Reactivity] No data available.

[Conditions to avoid] Avoid heat, flames, sparks and other sources of ignition.

Avoid direct sunlight and high temperature.

[Incompatible materials] No information available.

[Hazardous decomposition products] No information available.

[Possibility of hazardous reactions] No information available.

11. Toxicological information

[Information on toxicological effects]

Acute toxicity(oral)

Not classified : >2000 mg/kg (estimate value)

Acute toxicity(skin)

Not classified : >2000 mg/kg (estimate value)

Acute toxicity(inhalation:vapours)

Not classified : >20 mg/L (estimate value)

Skin corrosion/irritation

No information available.

Serious eye damage/Eye Irritation

No information available.

Respiratory sensitizer

No information available.

Skin sensitizer

No information available.

Germ cell mutagenicity

No information available.

Carcinogenicity

No information available.

Toxic to reproduction

Additive : Category2

Specific target organ systemic toxicity(single exposure)

No information available.

Specific target organ systemic toxicity(repeated exposure)

Additive : Category1

Aspiration hazard

No information available.

Hazard to the Aquatic Environment (Acute)

No information available.

Hazard to the Aquatic Environment (Chronic)

No information available.

12. Ecological information

No information available.

13. Disposal considerations

[Waste treatment methods]

Dispose in accordance with all current regulations and standards.

Do not allow it to flow into the drainages with waste fluid.

14. Transport information

[Environmental hazards] No information available.

[HS Code] 960810

[Special precautions for user] Check the container for any leakage. Load a cargo without a dropping or

incurring damage, and take causion against collapse of container.

15. Regulatory information

TSCA: Listed on the TSCA inventory or polymer substance.

[Chemical safety assessment]

Ink or lead are manufactured in accordance with ISO 8124-3 "Safety of Toys - Part 3"

- The information is based on our present knowledge at the date of its publication, and designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release.
- This shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

1. Product and Company Identification

[Product name] UB-150 Green

[File No.] 300079E 2014/11/05 [Date of issue]

[Details of Manufacture]

Manufacture's name: MITSUBISHI PENCIL CO., LTD.

Address: 5-23-37, HIGASHIOHI, SHINAGAWA, TOKYO, JAPAN

Telephone number: (Only office hour are available.)

03-3458-6281

03-3450-0363 telefax number:

2. Hazards identification

Information of this section is about the ink.

[Classification of the substance or mixture]

PHYSICO-CHEMICAL HAZARDS

Not applicable.

HEALTH HAZARDS

: Not classified Acute toxicity(oral) Acute toxicity(skin) : Not classified Acute toxicity(inhalation steam) : Not classified Skin corrosion/irritation : Category3 Serious eye damage/Eye Irritation : Not classified

Respiratory sensitizer Classification not possible

Skin sensitizer : Category1

Germ cell mutagenicity : Classification not possible Carcinogenicity : Classification not possible Toxic to reproduction : Classification not possible Specific target organ systemic toxicity(single exposure) : Classification not possible Specific target organ systemic toxicity(repeated exposure) : Classification not possible Aspiration hazard : Classification not possible

ENVIRONMENTAL HAZARDS

Hazard to the Aquatic Environment (Acute) : Classification not possible Hazard to the Aquatic Environment (Chronic) : Classification not possible

[Label elements]

Pictogram



Signal Word Warning

Hazard Statement Causes mild skin irritation

May cause an allergic skin reaction

Precautionary Statement

: Do not breathe dust/vapours etc..

: Wash contaminated clothing before reuse.

: IF ON SKIN: Wash with plenty of soap and water.

: If skin irritation occurs: Get medical advice/attention.

: If skin irritation or rash ouuurs: Get medical advice/attention.

: Dispose in accordance with all current regulations and standards.

[Other hazards] No information available.

3. Composition/information on ingredients

[The chemical product is a substance or a mixture]		Mixture	
[Chemical nature]	[Component parts]	Ink[Ink quantity of product :about 2.1g]	
Chemical name	Cas No.	Concentration range(wt%)	
Water	7732-18-5	50-80	
Glycerine	56-81-5	10-30	
Triethanolamine	102-71-6	<10	
Additive	Trade secret	<10	
Coloring agent	Trade secret	<10	
Resin	Trade secret	<10	

4. First aid measures

[Description of first aid measures]

Eye contact : Flush eyes with plenty of water for at least 15 minutes.

: Take off the contact lens if possible

: Consult medical advice depending on the symptoms.

Skin contact : Wash skin.

: Consult medical advice depending on the symptoms.

: Thoroughly clean and dry contaminated clothing and shoes before reuse.

Ingestion : Rinse mouth, give plenty of water to dilute. No specific intervention is indicated

as compound is not likely to be hazardous by ingestion.

: Consult medical advice depending on the symptoms.

Inhalation : Due to its low vapor pressure inhalation is unlikely at room temperature.

: If not feeling well, move to an area of fresh air and rest.: Consult medical advice depending on the symptoms.

[Most important symptoms and effects, both acute and delayed]

No information available.

[Indication of any immediate medical attention and special treatment needed]

No information available.

5. Firefighting measures

[Extinguishing media] Regular dry chemical, carbon dioxide, water, regular foam

[Special hazards arising from the substance or mixture]

No further relevant information available.

[Advice for firefighters] Stay upwind and keep out of low areas and avoid inhalation of material or

combustion by-products.

[Personal precautions, protective equipment and emergency procedures]

Rope off the area to contain the leak and prohibit entrance except for

authorized persons.

Wear appropriate protection gear.

Do not work in windward direction.

[Environmental precautions] Collect leaked material in empty container after leading outflow to a safe area

containing earth and sand.

Do not allow leaked material to pollute rivers, lakes, etc.

[Methods and material for containment and cleaning up]

Wipe off by dry cloth and wash with water.

Dispose of pollution or waste in accordance with national, state and local

regulations.

[Reference to other sections] No information available.

7. Handling and storage

[Precautions for safe handling]

Do not lick or swallow the ink.

Avoid contact with skin and eyes.

Recap after use (if there is a cap), and keep out of the reach of infants.

Don't shake.

[Conditions for safe storage, including any incompatibilities]

Keep away from oxidizing materials, ignition sources, high temperature and

direct sunlight.

Recommended temperature : 0-40°C

[Specific end use(s)] No information available.

8. Exposure controls/personal protection

[Control parameters]

 Chemical name
 OSHA
 ACGIH

 Glycerine
 (TWA)10mg/m3

 Triethanolamine
 (TWA)5mg/m3

[Exposure controls]

Protective equipment : Not required.
Respiratory protection : Not required.
Hands protection : Not required.
Eye protection : Not required.
Skin protection : Not required.

9. Physical and chemical properties

[Imformation on basic physical and chemical properties]

Color : Green State : Liquid

Odor : No information available.

pH : about 8.8

Boiling point : No information available.[Water 100°C]

Melting point : No information available.

Flash point : No information available.[Glycerine 177°C]
Autoignition temperature : No information available.[Glycerine 393°C]

Explosion limits : No information available.

Vapor density(air=1) : No information available.

Density : about 1.1

Solubility in water : No information available. Evaporation rate : No information available.

Volatile : >80%

[Other information] No information available.

10. Stability and reactivity

[Chemical stability] This mixture is stable in normal temperature, a condition of the pressure.

[Reactivity] No data available.

[Conditions to avoid] Avoid heat, flames, sparks and other sources of ignition.

Avoid direct sunlight and high temperature.

[Incompatible materials] No information available.

[Hazardous decomposition products] No information available.

[Possibility of hazardous reactions] No information available.

11. Toxicological information

[Information on toxicological effects]

Acute toxicity(oral)

Not classified : >2000 mg/kg (estimate value)

Acute toxicity(skin)

Not classified : >2000 mg/kg (estimate value)

Acute toxicity(inhalation:vapours)

Not classified : >20 mg/L (estimate value)

Skin corrosion/irritation

Triethanolamine : Category2

Serious eye damage/Eye Irritation

No information available.

Respiratory sensitizer

No information available.

Skin sensitizer

Triethanolamine : Category1

Germ cell mutagenicity

No information available.

Carcinogenicity

No information available.

Toxic to reproduction

No information available.

Specific target organ systemic toxicity(single exposure)

No information available.

Specific target organ systemic toxicity(repeated exposure)

No information available.

Aspiration hazard

No information available.

Hazard to the Aquatic Environment (Acute)

No information available.

Hazard to the Aquatic Environment (Chronic)

No information available.

12. Ecological information

No information available.

13. Disposal considerations

[Waste treatment methods]

Dispose in accordance with all current regulations and standards.

Do not allow it to flow into the drainages with waste fluid.

14. Transport information

[Environmental hazards] No information available.

[HS Code] 960810

[Special precautions for user] Check the container for any leakage. Load a cargo without a dropping or

incurring damage, and take causion against collapse of container.

15. Regulatory information

TSCA: Listed on the TSCA inventory or polymer substance.

[Chemical safety assessment]

Ink or lead are manufactured in accordance with ISO 8124-3 "Safety of Toys - Part 3"

- The information is based on our present knowledge at the date of its publication, and designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release.
- This shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.