

100301E

MITSUBISHI PENCIL CO., LTD.

[Date of issue]: 2017/03/28

## SAFETY DATA SHEET

19994-1069

## 1. Product and Company Identification

[Product name] PC-3ML Blue

[File No.] 100301E

[Date of issue] 2017/03/28

[Details of Manufacture]

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  
(Only office hour are available.)

## 2. Hazards identification

Information of this section is about the ink.

[Classification of the substance or mixture]

## PHYSICO-CHEMICAL HAZARDS

Not applicable.

## HEALTH HAZARDS

Acute toxicity(oral) : Not classified  
 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 : Category1  
 Carcinogenicity : Category2  
 Toxic to reproduction : Category1  
 Specific target organ systemic toxicity(single exposure) : Category1  
 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) : Not classified

[Label elements]

Pictogram



Signal Word

: Danger

Hazard Statement

: Causes mild skin irritation  
 : May cause an allergic skin reaction  
 : May cause genetic defects  
 : Suspected of causing cancer  
 : May damage fertility or the unborn child  
 : Causes damage to organs  
 : Causes damage to organs through prolonged or repeated exposure

Precautionary Statement

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- : 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.
  - : Wash contaminated clothing before reuse.
  - : IF ON SKIN: Wash with plenty of soap and water.
  - : IF exposed or concerned: Get medical advice/attention.
  - : If skin irritation occurs: Get medical advice/attention.
  - : If skin irritation or rash occurs: 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]
Chemical name	Cas No.
Water	7732-18-5
Ethanol	64-17-5
Glycerine	56-81-5
Silver	7440-22-4
Titanium dioxide	13463-67-7
1-Propanol	71-23-8

Ink[ Ink quantity of product :about 3.0g]  
Concentration range(wt%)

Water	50-80
Ethanol	< 10
Glycerine	< 10
Silver	< 10
Titanium dioxide	< 10
1-Propanol	< 1

### 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.

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**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.  
Wear suitable protective equipment.

**6. Accidental release measures**

- [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 the leeward.
- [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.
- [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
Titanium dioxide	-	(TWA)10mg/m3
Silver	-	(TWA)0.1mg/m3
Ethanol	-	(TWA)1000ppm
Glycerine	-	(TWA)10mg/m3

**[Exposure controls]**

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

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**9. Physical and chemical properties****[Information on basic physical and chemical properties]**

Color	: Blue lame
State	: Liquid
Odor	: slight odor
pH	: about 8.2
Boiling point	: No information available.[Water 100.0°C]
Melting point	: No information available.
Flash point	: No information available.
Autoignition temperature	: No information available.
Explosion limits	: No information available.
Vapor density(air=1)	: No information available.
Density	: about 1.2
Solubility in water	: No information available.
Evaporation rate	: No information available.
Volatile	: >70%
[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	
Silver	: Category2
Serious eye damage/Eye Irritation	
	No information available.
Respiratory sensitizer	
	No information available.

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**Skin sensitizer**

Silver : Category1

**Germ cell mutagenicity**

Ethanol : Category1B

**Carcinogenicity**

1-Propanol : Category2

**Toxic to reproduction**

Ethanol : Category1A

1-Propanol : Category2

**Specific target organ systemic toxicity(single exposure)**

Silver : Category1

**Specific target organ systemic toxicity(repeated exposure)**

Titanium dioxide : Category1

Silver : Category1

Ethanol : 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]**

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**[Special precautions for user]**

Check the container for any leakage. Load a cargo without a dropping or incurring damage, and take caution against collapse of container.

**15. Regulatory information**

Follow all regulation in your country.

**[Chemical safety assessment]**

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

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[Date of issue]: 2017/03/28

**16. Other information**

- 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.

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MITSUBISHI PENCIL CO., LTD.

[Date of issue]: 2017/03/28

## SAFETY DATA SHEET

## 1. Product and Company Identification

[Product name] PC-3ML Light blue

[File No.] 100297E

[Date of issue] 2017/03/28

[Details of Manufacture]

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  
(Only office hour are available.)

## 2. Hazards identification

Information of this section is about the ink.

[Classification of the substance or mixture]

## PHYSICO-CHEMICAL HAZARDS

Not applicable.

## HEALTH HAZARDS

Acute toxicity(oral)	: Not classified
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	: Category1
Carcinogenicity	: Category2
Toxic to reproduction	: Category1
Specific target organ systemic toxicity(single exposure)	: Category1
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)	: Not classified

[Label elements]

Pictogram



Signal Word

: Danger

Hazard Statement

: Causes mild skin irritation  
 : May cause an allergic skin reaction  
 : May cause genetic defects  
 : Suspected of causing cancer  
 : May damage fertility or the unborn child  
 : Causes damage to organs  
 : Causes damage to organs through prolonged or repeated exposure

Precautionary Statement

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- : 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.
  - : Wash contaminated clothing before reuse.
  - : IF ON SKIN: Wash with plenty of soap and water.
  - : IF exposed or concerned: Get medical advice/attention.
  - : If skin irritation occurs: Get medical advice/attention.
  - : If skin irritation or rash occurs: 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 3.0g]
Chemical name	Cas No.	Concentration range(wt%)
Water	7732-18-5	50-80
Ethanol	64-17-5	< 10
Glycerine	56-81-5	< 10
Silver	7440-22-4	< 10
Titanium dioxide	13463-67-7	< 10
1-Propanol	71-23-8	< 1

### 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.



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[Date of issue]:2017/03/28

**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.  
Wear suitable protective equipment.

**6. Accidental release measures**

- [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 the leeward.
- [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.
- [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
Titanium dioxide	-	(TWA)10mg/m <sup>3</sup>
Silver	-	(TWA)0.1mg/m <sup>3</sup>
Ethanol	-	(TWA)1000ppm
Glycerine	-	(TWA)10mg/m <sup>3</sup>

**[Exposure controls]**

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

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MITSUBISHI PENCIL CO., LTD.

[Date of issue]:2017/03/28

**9. Physical and chemical properties**

[Information on basic physical and chemical properties]

Color	: Sky blue lame
State	: Liquid
Odor	: slight odor
pH	: about 8.2
Boiling point	: No information available.[Water 100.0°C]
Melting point	: No information available.
Flash point	: No information available.
Autoignition temperature	: No information available.
Explosion limits	: No information available.
Vapor density(air=1)	: No information available.
Density	: about 1.2
Solubility in water	: No information available.
Evaporation rate	: No information available.
Volatile	: >70%
[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	
Silver	: Category2
Serious eye damage/Eye Irritation	
	No information available.
Respiratory sensitizer	
	No information available.

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MITSUBISHI PENCIL CO., LTD.

[Date of issue]: 2017/03/28

**Skin sensitizer**

Silver : Category1

**Germ cell mutagenicity**

Ethanol : Category1B

**Carcinogenicity**

1-Propanol : Category2

**Toxic to reproduction**

Ethanol : Category1A

1-Propanol : Category2

**Specific target organ systemic toxicity(single exposure)**

Silver : Category1

**Specific target organ systemic toxicity(repeated exposure)**

Titanium dioxide : Category1

Silver : Category1

Ethanol : 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]**

960820

**[Special precautions for user]**

Check the container for any leakage. Load a cargo without a dropping or incurring damage, and take caution against collapse of container.

**15. Regulatory information**

Follow all regulation in your country.

**[Chemical safety assessment]**

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

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MITSUBISHI PENCIL CO., LTD.

[Date of issue]:2017/03/28

**16. Other information**

- 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.

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MITSUBISHI PENCIL CO., LTD.

[Date of issue]: 2017/03/28

## SAFETY DATA SHEET

## 1. Product and Company Identification

[Product name] PC-3ML Violet

[File No.] 100298E

[Date of issue] 2017/03/28

[Details of Manufacture]

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  
(Only office hour are available.)

## 2. Hazards identification

Information of this section is about the ink.

[Classification of the substance or mixture]

## PHYSICO-CHEMICAL HAZARDS

Not applicable.

## HEALTH HAZARDS

Acute toxicity(oral)	: Not classified
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	: Category1
Carcinogenicity	: Category2
Toxic to reproduction	: Category1
Specific target organ systemic toxicity(single exposure)	: Category1
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)	: Not classified

[Label elements]

Pictogram



Signal Word

: Danger

Hazard Statement

: Causes mild skin irritation  
 : May cause an allergic skin reaction  
 : May cause genetic defects  
 : Suspected of causing cancer  
 : May damage fertility or the unborn child  
 : Causes damage to organs  
 : Causes damage to organs through prolonged or repeated exposure

Precautionary Statement

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MITSUBISHI PENCIL CO., LTD.

[Date of issue]: 2017/03/28

- : 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.
  - : Wash contaminated clothing before reuse.
  - : IF ON SKIN: Wash with plenty of soap and water.
  - : IF exposed or concerned: Get medical advice/attention.
  - : If skin irritation occurs: Get medical advice/attention.
  - : If skin irritation or rash occurs: 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]	Ink[ Ink quantity of product :about 3.0g]
Chemical name	Concentration range(wt%)
Water	50-80
Ethanol	< 10
Glycerine	< 10
Silver	< 10
Titanium dioxide	< 10
1-Propanol	< 1

### 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.

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MITSUBISHI PENCIL CO., LTD.

[Date of issue]: 2017/03/28

**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.  
Wear suitable protective equipment.

**6. Accidental release measures**

- [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 the leeward.
- [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.
- [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
Titanium dioxide	-	(TWA)10mg/m <sup>3</sup>
Silver	-	(TWA)0.1mg/m <sup>3</sup>
Ethanol	-	(TWA)1000ppm
Glycerine	-	(TWA)10mg/m <sup>3</sup>

**[Exposure controls]**

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

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MITSUBISHI PENCIL CO., LTD.

[Date of issue]: 2017/03/28

**9. Physical and chemical properties****[Information on basic physical and chemical properties]**

Color	: Violet lame
State	: Liquid
Odor	: slight odor
pH	: about 8.2
Boiling point	: No information available.[Water 100.0°C]
Melting point	: No information available.
Flash point	: No information available.
Autoignition temperature	: No information available.
Explosion limits	: No information available.
Vapor density(air=1)	: No information available.
Density	: about 1.2
Solubility in water	: No information available.
Evaporation rate	: No information available.
Volatile	: >70%
[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	
Silver	: Category2
Serious eye damage/Eye Irritation	
	No information available.
Respiratory sensitizer	
	No information available.



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MITSUBISHI PENCIL CO., LTD.

[Date of issue]:2017/03/28

**Skin sensitizer**

Silver : Category1

**Germ cell mutagenicity**

Ethanol : Category1B

**Carcinogenicity**

1-Propanol : Category2

**Toxic to reproduction**

Ethanol : Category1A

1-Propanol : Category2

**Specific target organ systemic toxicity(single exposure)**

Silver : Category1

**Specific target organ systemic toxicity(repeated exposure)**

Titanium dioxide : Category1

Silver : Category1

Ethanol : 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]**

960820

**[Special precautions for user]**

Check the container for any leakage. Load a cargo without a dropping or incurring damage, and take caution against collapse of container.

**15. Regulatory information**

Follow all regulation in your country.

**[Chemical safety assessment]**

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

100298E

MITSUBISHI PENCIL CO., LTD.

[Date of issue]: 2017/03/28

**16. Other information**

- 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.
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MITSUBISHI PENCIL CO., LTD.

[Date of issue]: 2017/03/28

## SAFETY DATA SHEET

## 1. Product and Company Identification

[Product name] PC-3ML Pink

[File No.] 100299E

[Date of issue] 2017/03/28

[Details of Manufacture]

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  
(Only office hour are available.)

## 2. Hazards identification

Information of this section is about the ink.

[Classification of the substance or mixture]

## PHYSICO-CHEMICAL HAZARDS

Not applicable.

## HEALTH HAZARDS

Acute toxicity(oral)	: Not classified
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	: Category1
Carcinogenicity	: Category2
Toxic to reproduction	: Category1
Specific target organ systemic toxicity(single exposure)	: Category1
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)	: Not classified

[Label elements]

Pictogram



Signal Word

: Danger

Hazard Statement

: Causes mild skin irritation  
 : May cause an allergic skin reaction  
 : May cause genetic defects  
 : Suspected of causing cancer  
 : May damage fertility or the unborn child  
 : Causes damage to organs  
 : Causes damage to organs through prolonged or repeated exposure

Precautionary Statement

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- : 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.
  - : Wash contaminated clothing before reuse.
  - : IF ON SKIN: Wash with plenty of soap and water.
  - : IF exposed or concerned: Get medical advice/attention.
  - : If skin irritation occurs: Get medical advice/attention.
  - : If skin irritation or rash occurs: 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 3.0g]
Chemical name	Cas No.	Concentration range(wt%)
Water	7732-18-5	50-80
Ethanol	64-17-5	< 10
Glycerine	56-81-5	< 10
Silver	7440-22-4	< 10
Titanium dioxide	13463-67-7	< 10
1-Propanol	71-23-8	< 1

### 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.

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**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.  
Wear suitable protective equipment.

**6. Accidental release measures**

- [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 the leeward.
- [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.
- [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
Titanium dioxide	-	(TWA)10mg/m3
Silver	-	(TWA)0.1mg/m3
Ethanol	-	(TWA)1000ppm
Glycerine	-	(TWA)10mg/m3

## [Exposure controls]

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

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## 9. Physical and chemical properties

### [Information on basic physical and chemical properties]

Color	: Pink lame
State	: Liquid
Odor	: slight odor
pH	: about 8.0
Boiling point	: No information available.[Water 100.0°C]
Melting point	: No information available.
Flash point	: No information available.
Autoignition temperature	: No information available.
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	: >60%
[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	
Silver	: Category2
Serious eye damage/Eye Irritation	
No information available.	
Respiratory sensitizer	
No information available.	

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MITSUBISHI PENCIL CO., LTD.

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**Skin sensitizer**

Silver : Category1

**Germ cell mutagenicity**

Ethanol : Category1B

**Carcinogenicity**

1-Propanol : Category2

**Toxic to reproduction**

Ethanol : Category1A

1-Propanol : Category2

**Specific target organ systemic toxicity(single exposure)**

Silver : Category1

**Specific target organ systemic toxicity(repeated exposure)**

Titanium dioxide : Category1

Silver : Category1

Ethanol : 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]**

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**[Special precautions for user]**

Check the container for any leakage. Load a cargo without a dropping or incurring damage, and take caution against collapse of container.

**15. Regulatory information**

Follow all regulation in your country.

**[Chemical safety assessment]**

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

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MITSUBISHI PENCIL CO., LTD.

[Date of issue]:2017/03/28

**16. Other information**

- 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.



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MITSUBISHI PENCIL CO., LTD.

[Date of issue]: 2017/03/28

## SAFETY DATA SHEET

## 1. Product and Company Identification

[Product name] PC-3ML Red

[File No.] 100300E

[Date of issue] 2017/03/28

[Details of Manufacture]

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  
(Only office hour are available.)

## 2. Hazards identification

Information of this section is about the ink.

[Classification of the substance or mixture]

## PHYSICO-CHEMICAL HAZARDS

Not applicable.

## HEALTH HAZARDS

Acute toxicity(oral)	: Not classified
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	: Category1
Carcinogenicity	: Category2
Toxic to reproduction	: Category1
Specific target organ systemic toxicity(single exposure)	: Category1
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)	: Not classified

[Label elements]

Pictogram



Signal Word

: Danger

Hazard Statement

: Causes mild skin irritation  
 : May cause an allergic skin reaction  
 : May cause genetic defects  
 : Suspected of causing cancer  
 : May damage fertility or the unborn child  
 : Causes damage to organs  
 : Causes damage to organs through prolonged or repeated exposure

Precautionary Statement

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MITSUBISHI PENCIL CO., LTD.

[Date of issue]: 2017/03/28

- : 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.
  - : Wash contaminated clothing before reuse.
  - : IF ON SKIN: Wash with plenty of soap and water.
  - : IF exposed or concerned: Get medical advice/attention.
  - : If skin irritation occurs: Get medical advice/attention.
  - : If skin irritation or rash occurs: 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 3.0g]
Chemical name	Gas No.	Concentration range(wt%)
Water	7732-18-5	50-80
Ethanol	64-17-5	< 10
Glycerine	56-81-5	< 10
Silver	7440-22-4	< 10
Titanium dioxide	13463-67-7	< 10
1-Propanol	71-23-8	< 1

### 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.

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MITSUBISHI PENCIL CO., LTD.

[Date of issue]:2017/03/28

**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. Wear suitable protective equipment.

**6. Accidental release measures**

[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 the leeward.
[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.
[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
Titanium dioxide	-	(TWA)10mg/m3
Silver	-	(TWA)0.1mg/m3
Ethanol	-	(TWA)1000ppm
Glycerine	-	(TWA)10mg/m3
[Exposure controls]		
Protective equipment	: Not required.	
Respiratory protection	: Not required.	
Hands protection	: Not required.	
Eye protection	: Not required.	
Skin protection	: Not required.	

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MITSUBISHI PENCIL CO., LTD.

[Date of issue]:2017/03/28

**9. Physical and chemical properties****[Information on basic physical and chemical properties]**

Color	: Red lame
State	: Liquid
Odor	: slight odor
pH	: about 8.2
Boiling point	: No information available.[Water 100.0°C]
Melting point	: No information available.
Flash point	: No information available.
Autoignition temperature	: No information available.
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	: >70%
[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	
Silver	: Category2
Serious eye damage/Eye Irritation	
	No information available.
Respiratory sensitizer	
	No information available.

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MITSUBISHI PENCIL CO., LTD.

[Date of issue]:2017/03/28

**Skin sensitizer**

Silver : Category1

**Germ cell mutagenicity**

Ethanol : Category1B

**Carcinogenicity**

1-Propanol : Category2

**Toxic to reproduction**

Ethanol : Category1A

1-Propanol : Category2

**Specific target organ systemic toxicity(single exposure)**

Silver : Category1

**Specific target organ systemic toxicity(repeated exposure)**

Titanium dioxide : Category1

Silver : Category1

Ethanol : 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]**

960820

**[Special precautions for user]**

Check the container for any leakage. Load a cargo without a dropping or incurring damage, and take caution against collapse of container.

**15. Regulatory information**

Follow all regulation in your country.

**[Chemical safety assessment]**

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

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MITSUBISHI PENCIL CO., LTD.

[Date of issue]:2017/03/28

**16. Other information**

- 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.

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MITSUBISHI PENCIL CO., LTD.

[Date of issue]: 2017/03/28

## SAFETY DATA SHEET

## 1. Product and Company Identification

[Product name] PC-3ML Orange  
 [File No.] 100295E  
 [Date of issue] 2017/03/28  
 [Details of Manufacture]

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  
 (Only office hour are available.)

## 2. Hazards identification

Information of this section is about the ink.

[Classification of the substance or mixture]

## PHYSICO-CHEMICAL HAZARDS

Not applicable.

## HEALTH HAZARDS

Acute toxicity(oral) : Not classified  
 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 : Category1  
 Carcinogenicity : Category2  
 Toxic to reproduction : Category1  
 Specific target organ systemic toxicity(single exposure) : Category1  
 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) : Not classified

[Label elements]

Pictogram



Signal Word

: Danger

Hazard Statement

: Causes mild skin irritation  
 : May cause an allergic skin reaction  
 : May cause genetic defects  
 : Suspected of causing cancer  
 : May damage fertility or the unborn child  
 : Causes damage to organs  
 : Causes damage to organs through prolonged or repeated exposure

Precautionary Statement

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MITSUBISHI PENCIL CO., LTD.

[Date of issue]:2017/03/28

- : 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.
  - : Wash contaminated clothing before reuse.
  - : IF ON SKIN: Wash with plenty of soap and water.
  - : IF exposed or concerned: Get medical advice/attention.
  - : If skin irritation occurs: Get medical advice/attention.
  - : If skin irritation or rash occurs: 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 3.0g]
Chemical name	Cas No.	Concentration range(wt%)
Water	7732-18-5	50-80
Ethanol	64-17-5	< 10
Glycerine	56-81-5	< 10
Silver	7440-22-4	< 10
Titanium dioxide	13463-67-7	< 10
1-Propanol	71-23-8	< 1

### 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.



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MITSUBISHI PENCIL CO., LTD.

[Date of issue]: 2017/03/28

**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.  
Wear suitable protective equipment.

**6. Accidental release measures**

- [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 the leeward.
- [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.
- [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
Titanium dioxide	-	(TWA)10mg/m <sup>3</sup>
Silver	-	(TWA)0.1mg/m <sup>3</sup>
Ethanol	-	(TWA)1000ppm
Glycerine	-	(TWA)10mg/m <sup>3</sup>

**[Exposure controls]**

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

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MITSUBISHI PENCIL CO., LTD.

[Date of issue]: 2017/03/28

**9. Physical and chemical properties**

## [Information on basic physical and chemical properties]

Color	: Orange lame
State	: Liquid
Odor	: slight odor
pH	: about 8.0
Boiling point	: No information available.[Water 100.0°C]
Melting point	: No information available.
Flash point	: No information available.
Autoignition temperature	: No information available.
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	: >70%
[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	
Silver	: Category2
Serious eye damage/Eye Irritation	
	No information available.
Respiratory sensitizer	
	No information available.

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MITSUBISHI PENCIL CO., LTD.

[Date of issue]: 2017/03/28

**Skin sensitizer**  
Silver : Category1

**Germ cell mutagenicity**  
Ethanol : Category1B

**Carcinogenicity**  
1-Propanol : Category2

**Toxic to reproduction**  
Ethanol : Category1A  
1-Propanol : Category2

**Specific target organ systemic toxicity(single exposure)**  
Silver : Category1

**Specific target organ systemic toxicity(repeated exposure)**  
Titanium dioxide : Category1  
Silver : Category1  
Ethanol : 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]

960820

[Special precautions for user]

Check the container for any leakage. Load a cargo without a dropping or incurring damage, and take caution against collapse of container.

**15. Regulatory information**

Follow all regulation in your country.

[Chemical safety assessment]

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

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MITSUBISHI PENCIL CO., LTD.

[Date of issue]: 2017/03/28

**16. Other information**

- 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.

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MITSUBISHI PENCIL CO., LTD.

[Date of issue]: 2017/03/28

## SAFETY DATA SHEET

## 1. Product and Company Identification

[Product name] PC-3ML Yellow  
 [File No.] 100180E  
 [Date of issue] 2017/03/28  
 [Details of Manufacture]

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  
 (Only office hour are available.)

## 2. Hazards identification

Information of this section is about the ink.

[Classification of the substance or mixture]

## PHYSICO-CHEMICAL HAZARDS

Not applicable.

## HEALTH HAZARDS

Acute toxicity(oral) : Not classified  
 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) : Category1  
 Specific target organ systemic toxicity(repeated exposure) : Category1  
 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

: Danger

Hazard Statement

: Causes mild skin irritation  
 : May cause an allergic skin reaction  
 : Causes damage to organs  
 : 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.  
 : Get medical advice/attention if you feel unwell.

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- : Wash contaminated clothing before reuse.
  - : IF ON SKIN: Wash with plenty of soap and water.
  - : IF exposed or concerned: Get medical advice/attention.
  - : If skin irritation occurs: Get medical advice/attention.
  - : If skin irritation or rash occurs: 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]	Ink[ Ink quantity of product :about 3.0g]
Chemical name	Cas No. Concentration range(wt%)
Water	7732-18-5 50-80
Silver	7440-22-4 < 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.

Wear suitable protective equipment.

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**6. Accidental release measures**

[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 the leeward.
[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.
[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
Silver	-	(TWA)0.1mg/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**

[Information on basic physical and chemical properties]	
Color	: Shiny Yellow
State	: Liquid
Odor	: slight odor
pH	: about 8.1
Boiling point	: No information available.[Water 100.0°C]
Melting point	: No information available.
Flash point	: No information available.
Autoignition temperature	: No information available.

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Explosion limits : No information available.  
 Vapor density(air=1) : No information available.  
 Density : about 1.1  
 Solubility in water : soluble  
 Evaporation rate : No information available.  
 Volatile : >70%  
 [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  
 Silver : Category2  
 Serious eye damage/Eye Irritation  
 No information available.  
 Respiratory sensitizer  
 No information available.  
 Skin sensitizer  
 Silver : Category1  
 Germ cell mutagenicity  
 No information available.  
 Carcinogenicity  
 No information available.  
 Toxic to reproduction  
 No information available.  
 Specific target organ systemic toxicity(single exposure)  
 Silver : Category1



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**Specific target organ systemic toxicity(repeated exposure)****Silver : 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]**

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**[Special precautions for user]**

Check the container for any leakage. Load a cargo without a dropping or incurring damage, and take caution against collapse of container.

**15. Regulatory information**

Follow all regulation in your country.

**[Chemical safety assessment]**

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

**16. Other information**

- 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.

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## SAFETY DATA SHEET

## 1. Product and Company Identification

[Product name] PC-3ML Green  
 [File No.] 100296E  
 [Date of issue] 2017/03/28  
 [Details of Manufacture]

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  
 (Only office hour are available.)

## 2. Hazards identification

Information of this section is about the ink.

[Classification of the substance or mixture]

## PHYSICO-CHEMICAL HAZARDS

Not applicable.

## HEALTH HAZARDS

Acute toxicity(oral) : Not classified  
 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 : Category1  
 Carcinogenicity : Category2  
 Toxic to reproduction : Category1  
 Specific target organ systemic toxicity(single exposure) : Category1  
 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) : Not classified

[Label elements]

Pictogram



Signal Word

: Danger

Hazard Statement

: Causes mild skin irritation  
 : May cause an allergic skin reaction  
 : May cause genetic defects  
 : Suspected of causing cancer  
 : May damage fertility or the unborn child  
 : Causes damage to organs  
 : Causes damage to organs through prolonged or repeated exposure

Precautionary Statement

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- : 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.
  - : Wash contaminated clothing before reuse.
  - : IF ON SKIN: Wash with plenty of soap and water.
  - : IF exposed or concerned: Get medical advice/attention.
  - : If skin irritation occurs: Get medical advice/attention.
  - : If skin irritation or rash occurs: 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 3.0g]
Chemical name	Cas No.	Concentration range(wt%)
Water	7732-18-5	50-80
Ethanol	64-17-5	< 10
Glycerine	56-81-5	< 10
Silver	7440-22-4	< 10
Titanium dioxide	13463-67-7	< 10
1-Propanol	71-23-8	< 1

### 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.

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**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.  
Wear suitable protective equipment.

**6. Accidental release measures**

- [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 the leeward.
- [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.
- [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
Titanium dioxide	-	(TWA)10mg/m3
Silver	-	(TWA)0.1mg/m3
Ethanol	-	(TWA)1000ppm
Glycerine	-	(TWA)10mg/m3

**[Exposure controls]**

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

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## 9. Physical and chemical properties

[Information on basic physical and chemical properties]

Color	: Green lame
State	: Liquid
Odor	: slight odor
pH	: about 8.0
Boiling point	: No information available.[Water 100.0°C]
Melting point	: No information available.
Flash point	: No information available.
Autoignition temperature	: No information available.
Explosion limits	: No information available.
Vapor density(air=1)	: No information available.
Density	: about 1.2
Solubility in water	: No information available.
Evaporation rate	: No information available.
Volatile	: >70%
[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	
Silver	: Category2
Serious eye damage/Eye Irritation	
No information available.	
Respiratory sensitizer	
No information available.	

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**Skin sensitizer**

Silver : Category1

**Germ cell mutagenicity**

Ethanol : Category1B

**Carcinogenicity**

1-Propanol : Category2

**Toxic to reproduction**

Ethanol : Category1A

1-Propanol : Category2

**Specific target organ systemic toxicity(single exposure)**

Silver : Category1

**Specific target organ systemic toxicity(repeated exposure)**

Titanium dioxide : Category1

Silver : Category1

Ethanol : 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]**

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**[Special precautions for user]**

Check the container for any leakage. Load a cargo without a dropping or incurring damage, and take caution against collapse of container.

**15. Regulatory information**

Follow all regulation in your country.

**[Chemical safety assessment]**

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

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