SAFETY DATA SHEET

1. Product and Company Identification
   [Product name] UM-120 Black
   [File No.] 304162E
   [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: 03-3458-6281
telefax number: 03-3450-0363

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 : Not classified
   Serious eye damage/Eye Irritation : Category2
   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) : Category1
   Specific target organ systemic toxicity(repeated exposure) : Category1
   Aspiration hazard : Not classified
   ENVIRONMENTAL HAZARDS
   Hazard to the Aquatic Environment (Acute) : Not classified
   Hazard to the Aquatic Environment (Chronic) : Classification not possible

[Label elements]
   Pictogram : ![Pictogram]
   Signal Word : Danger
   Hazard Statement : Causes serious eye damage
   : Suspected of causing cancer
   : Suspected of damaging fertility or the unborn child
   : 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.
[Use personal protective equipment as required. (Refer to Section 8)

Get medical advice/attention if you feel unwell.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

IF exposed or concerned: Get medical advice/attention.

If eye irritation persists: 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 1.1g]

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Cas No.</th>
<th>Concentration range (wt%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>50-80</td>
</tr>
<tr>
<td>Additive</td>
<td>Trade secret</td>
<td>10-30</td>
</tr>
<tr>
<td>1,2-Ethanediol</td>
<td>107-21-1</td>
<td>&lt;10</td>
</tr>
<tr>
<td>Carbon black</td>
<td>1333-86-4</td>
<td>&lt;10</td>
</tr>
<tr>
<td>Resin</td>
<td>Trade secret</td>
<td>&lt;10</td>
</tr>
</tbody>
</table>

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.
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 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]

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>OSHA</th>
<th>ACGIH</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon black</td>
<td></td>
<td>(TWA)3.5mg/m3</td>
</tr>
<tr>
<td>1,2-Ethanediol</td>
<td></td>
<td>(STEL)100mg/m3</td>
</tr>
</tbody>
</table>

[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 : Black
State : Liquid
Odor : No information available.
pH : No information available.
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. [1,2-Ethanediol 398°C]
Explosion limits : No information available.
Vapor density (air=1) : No information available.
Density : No information available.
Solubility in water : soluble
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
1,2-Ethanediol : Category 2B
Additive : Category 2A
Respiratory sensitizer : No information available.
Skin sensitizer : No information available.
Germ cell mutagenicity : No information available.
Carcinogenicity
Carbon black : Category 2
Toxic to reproduction
Additive : Category2

Specific target organ systemic toxicity (single exposure)
1,2-Ethanediol : Category1

Specific target organ systemic toxicity (repeated exposure)
Carbon black : Category1
1,2-Ethanediol : 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 caution 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"

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.
SAFETY DATA SHEET

1. Product and Company Identification

[Product name] UM-120 Blue
[File No.] 304163E
[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: 03-3458-6281
fax number: 03-3450-0363

2. Hazards identification

Information of this section is about the ink.

Classif cation 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 : Category 3
Serious eye damage/Eye Irritation : Category 2
Respiratory sensitizer : Classification not possible
Skin sensitizer : Classification not possible
Germ cell mutagenicity : Classification not possible
Carcinogenicity : Classification not possible
Toxic to reproduction : Category 2
Specific target organ systemic toxicity(single exposure) : Category 1
Specific target organ systemic toxicity(repeated exposure) : Category 1
Aspiration hazard : Not classified

ENVIRONMENTAL HAZARDS

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

[Label elements]

Pictogram

Signal Word : Danger
Hazard Statement : Causes mild skin irritation
: Causes serious eye damage
: Suspected of damaging fertility or the unborn child
: 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.
Use personal protective equipment as required. (Refer to Section 8)

Get medical advice/attention if you feel unwell.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

IF exposed or concerned: Get medical advice/attention.

If skin irritation occurs: Get medical advice/attention.

If eye irritation persists: 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 1.1g]
Chemical name Cas No. Concentration range (wt%)
Water 7732-18-5 50-80
1,2-Ethanediol 107-21-1 10-30
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.

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 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]

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>OSHA</th>
<th>ACGIH</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,2-Ethanediol</td>
<td></td>
<td>(STEL)100mg/m3</td>
</tr>
</tbody>
</table>

[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: Blue
- State: Liquid
- Odor: No information available.
- pH: about 8.4
- Boiling point: No information available.[Water 100°C]
- Melting point: No information available.
Flash point : No information available.[1,2-Ethanediol 111°C]
Autoignition temperature : No information available.[1,2-Ethanediol 398°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 : 1,2-Ethanediol : Category 3

Serious eye damage/Eye Irritation : 1,2-Ethanediol : Category 2B
                             : Additive : Category 2A

Respiratory sensitizer : No information available.

Skin sensitizer : No information available.

Germ cell mutagenicity : No information available.

Carcinogenicity : 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 caution 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”

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.
SAFETY DATA SHEET

1. Product and Company Identification

[Product name] UM-120 Red

[File No.] 304164E

[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: 03-3458-6281
telefax number: 03-3450-0363

(Only office hour 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: Category 3
Serious eye damage/Eye Irritation: Category 2
Respiratory sensitizer: Classification not possible
Skin sensitizer: Classification not possible
Germ cell mutagenicity: Classification not possible
Carcinogenicity: Classification not possible
Toxic to reproduction: Category 2
Specific target organ systemic toxicity(single exposure): Category 1
Specific target organ systemic toxicity(repeated exposure): Category 1
Aspiration hazard: Not classified

ENVIRONMENTAL HAZARDS

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

[Label elements]

Pictogram : ☠️⚠️

Signal Word : Danger
Hazard Statement : Causes mild skin irritation
Causes serious eye damage
Suspected of damaging fertility or the unborn child
 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.
Use personal protective equipment as required. (Refer to Section 8)

Get medical advice/attention if you feel unwell.

If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If exposed or concerned: Get medical advice/attention.

If skin irritation occurs: Get medical advice/attention.

If eye irritation persists: 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 1.1g]

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Cas No.</th>
<th>Concentration range (wt%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>50-80</td>
</tr>
<tr>
<td>1,2-Ethanediol</td>
<td>107-21-1</td>
<td>10-30</td>
</tr>
<tr>
<td>Additive</td>
<td>Trade secret</td>
<td>&lt;10</td>
</tr>
<tr>
<td>Coloring agent</td>
<td>Trade secret</td>
<td>&lt;10</td>
</tr>
<tr>
<td>Resin</td>
<td>Trade secret</td>
<td>&lt;10</td>
</tr>
</tbody>
</table>

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.
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 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℃

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

8. Exposure controls/personal protection

[Control parameters]

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>OSHA</th>
<th>ACGIH</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,2-Ethanediol</td>
<td></td>
<td>(STEL)100mg/m3</td>
</tr>
</tbody>
</table>

[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]

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Color</td>
<td>Red</td>
</tr>
<tr>
<td>State</td>
<td>Liquid</td>
</tr>
<tr>
<td>Odor</td>
<td>No information available.</td>
</tr>
<tr>
<td>pH</td>
<td>No information available.</td>
</tr>
<tr>
<td>Boiling point</td>
<td>No information available.</td>
</tr>
<tr>
<td>Melting point</td>
<td>No information available.</td>
</tr>
</tbody>
</table>
Flash point: No information available. [Additive 97°C]
Autoignition temperature: No information available. [Additive 306°C]
Explosion limits: No information available.
Vapor density (air=1): No information available.
Density: No information available.
Solubility in water: soluble
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
1,2-Ethanediol: Category 3
Serious eye damage/Eye irritation
1,2-Ethanediol: Category 2B
Additive: Category 2A
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)
   1,2-Ethanediol : Category1

Specific target organ systemic toxicity (repeated exposure)
   1,2-Ethanediol : 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
   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”

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.
SAFETY DATA SHEET

1. Product and Company Identification

[Product name] UM-120 Orange
[File No.] 304165E
[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: 03-3458-6281
(fax number: 03-3450-0363)

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 : Category 3
Serious eye damage/Eye Irritation : Category 2
Respiratory sensitizer : Classification not possible
Skin sensitizer : Classification not possible
Germ cell mutagenicity : Classification not possible
Carcinogenicity : Classification not possible
Toxic to reproduction : Category 2
Specific target organ systemic toxicity(single exposure) : Category 1
Specific target organ systemic toxicity(repeated exposure) : Category 1
Aspiration hazard : Not classified

ENVIRONMENTAL HAZARDS

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

[Label elements]

Pictogram

Signal Word : Danger
Hazard Statement : Causes mild skin irritation
: Causes serious eye damage
: Suspected of damaging fertility or the unborn child
: 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.
3. Composition/information on ingredients

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

[Chemical name] [Component parts] Ink [Ink quantity of product : about 1.1 g]

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Cas No.</th>
<th>Concentration range (wt%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>50-80</td>
</tr>
<tr>
<td>1,2-Ethanediol</td>
<td>107-21-1</td>
<td>10-30</td>
</tr>
<tr>
<td>Additive</td>
<td>Trade secret</td>
<td>10-30</td>
</tr>
<tr>
<td>Coloring agent</td>
<td>Trade secret</td>
<td>&lt;10</td>
</tr>
</tbody>
</table>

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.
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 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]

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>OSHA</th>
<th>ACGIH</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,2-Ethanediol</td>
<td></td>
<td>(STEL)100mg/m3</td>
</tr>
</tbody>
</table>

[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 : Orange
State : Liquid
Odor : No information available.
pH : about 8.3
Boiling point : No information available.[Water 100°C]
Melting point : No information available.
Flash point: No information available.[Additive 97°C]
Autoignition temperature: No information available.[Additive 306°C]
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: >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
1,2-Ethanediol: Category 3
Serious eye damage/Eye Irritation
1,2-Ethanediol: Category 2B
Additive: Category 2A
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)
1,2-Ethanediol : Category1

Specific target organ systemic toxicity (repeated exposure)
1,2-Ethanediol : 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 caution 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”

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.
SAFETY DATA SHEET

1. Product and Company Identification

[Product name] UM-120 Green
[File No.] 304166E
[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: 03-3458-6281
telefax number: 03-3450-0363

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: Category2
Respiratory sensitizer: Classification not possible
Skin sensitizer: Category1
Germ cell mutagenicity: Classification not possible
Carcinogenicity: Classification not possible
Toxic to reproduction: Category2
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): Not classified
Hazard to the Aquatic Environment (Chronic): Classification not possible

[Label elements]
Pictogram:

Signal Word: Danger
Hazard Statement:
- Causes mild skin irritation
- Causes serious eye damage
- May cause an allergic skin reaction
- Suspected of damaging fertility or the unborn child
- Causes damage to organs
- Causes damage to organs through prolonged or repeated exposure

Precautionary Statement:
- Do not breathe dust/vapours etc..
3. Composition/information on ingredients

[The chemical product is a substance or a mixture]

Mixture

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Component parts</th>
<th>Ink quantity of product : about 1.1g</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>Cas No. 7732-18-5</td>
<td>Concentration range (wt%) 50-80</td>
</tr>
<tr>
<td>Additive</td>
<td>Trade secret</td>
<td></td>
</tr>
<tr>
<td>1,2-Ethanediol</td>
<td>Cas No. 107-21-1</td>
<td>Concentration range (wt%) &lt;10</td>
</tr>
<tr>
<td>Triethanolamine</td>
<td>Cas No. 102-71-6</td>
<td>Concentration range (wt%) &lt;10</td>
</tr>
<tr>
<td>Coloring agent</td>
<td>Trade secret</td>
<td></td>
</tr>
<tr>
<td>Resin</td>
<td>Trade secret</td>
<td></td>
</tr>
<tr>
<td>Polyethylene glycol</td>
<td>Cas No. 9016-45-9</td>
<td>Concentration range (wt%) &lt;1</td>
</tr>
<tr>
<td>nonylphenyl ether</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. 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.

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 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]

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>OSHA</th>
<th>ACGIH</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,2-Ethane-diol</td>
<td>–</td>
<td>(STEL)100mg/m³</td>
</tr>
<tr>
<td>Triethanolamine</td>
<td>–</td>
<td>(TWA)5mg/m³</td>
</tr>
</tbody>
</table>

[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: Green
State: Liquid
Odor: No information available.
\( \text{pH} \): about 8.4
Boiling point: No information available. [Water 100°C]
Melting point: No information available.
Flash point: No information available. [Additive 97°C]
Autoignition temperature: No information available. [Additive 306°C]
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: >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
1,2-Ethanediol: Category3
Triethanolamine: Category2

Serious eye damage/Eye Irritation
1,2-Ethanediol: Category2B
Triethanolamine: Category2A
Additive: Category2A
Respiratory sensitizer
   No information available.

Skin sensitizer
   Triethanolamine : Category1

Germ cell mutagenicity
   No information available.

Carcinogenicity
   No information available.

Toxic to reproduction
   Polyethylene glycol nonylphenyl ether : Category2
   Additive : Category2

Specific target organ systemic toxicity (single exposure)
   1,2-Ethanediol : Category1

Specific target organ systemic toxicity (repeated exposure)
   1,2-Ethanediol : 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 caution 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"
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.
SAFETY DATA SHEET

1. Product and Company Identification

[Product name] UM-120 Light blue

[File No.] 304167E

[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: 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 : Classification not possible
Serious eye damage/Eye Irritation : Not classified
Respiratory sensitizer : Classification not possible
Skin sensitizer : Classification not possible
Germ cell mutagenicity : Classification not possible
Carcinogenicity : Classification not possible
Toxic to reproduction : Category2
Specific target organ systemic toxicity(single exposure) : Classification not possible
Specific target organ systemic toxicity(repeated exposure) : Classification not possible
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 : Warning
Hazard Statement : Suspected of damaging fertility or the unborn child
Precautionary Statement : Use personal protective equipment as required.(Refer to Section 8)
 : 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 1.1g]

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Cas No.</th>
<th>Concentration range (wt%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>50-80</td>
</tr>
<tr>
<td>1,2-Propanediol</td>
<td>57-55-6</td>
<td>10-30</td>
</tr>
<tr>
<td>Additive</td>
<td>Trade secret</td>
<td>10-30</td>
</tr>
<tr>
<td>Coloring agent</td>
<td>Trade secret</td>
<td>&lt;10</td>
</tr>
<tr>
<td>Resin</td>
<td>Trade secret</td>
<td>&lt;10</td>
</tr>
</tbody>
</table>

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.
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 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

[Information on basic physical and chemical properties]  
Color : Light blue
State : Liquid
Odor : No information available.
pH : about 8.7
Boiling point : No information available.[Water 100°C]
Melting point : No information available.
Flash point : No information available.[1,2-Propanediol 99°C]
Autoignition temperature : No information available.[1,2-Propanediol 421°C]
Explosion limits : No information available.
Vapor density(air=1) : No information available.
Density : about 1.2
Solubility in water : soluble
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)
   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 caution 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”

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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SAFETY DATA SHEET

1. Product and Company Identification

[Product name] UM-120 Violet
[File No.] 304168E
[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: 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 : Category2
Respiratory sensitizer : Classification not possible
Skin sensitizer : Classification not possible
Germ cell mutagenicity : Classification not possible
Carcinogenicity : Classification not possible
Toxic to reproduction : Category2
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) : Not classified
Hazard to the Aquatic Environment (Chronic) : Classification not possible

[Label elements]

Pictogram

Signal Word : Danger
Hazard Statement : Causes mild skin irritation
 : Causes serious eye damage
 : Suspected of damaging fertility or the unborn child
 : 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.
: Use personal protective equipment as required. (Refer to Section 8)
: Get medical advice/attention if you feel unwell.
: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
: IF exposed or concerned: Get medical advice/attention.
: IF skin irritation occurs: Get medical advice/attention.
: IF eye irritation persists: Get medical advice/attention.
: Dispose in accordance with all current regulations and standards.

3. Composition/information on ingredients

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Chemical name</th>
<th>Chemical name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>50-80</td>
</tr>
<tr>
<td>1,2-Ethanediol</td>
<td>107-21-1</td>
<td>10-30</td>
</tr>
<tr>
<td>Additive</td>
<td>Trade secret</td>
<td>&lt;10</td>
</tr>
<tr>
<td>Coloring agent</td>
<td>Trade secret</td>
<td>&lt;10</td>
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</tbody>
</table>

4. First aid measures

<table>
<thead>
<tr>
<th>Description of first aid measures</th>
</tr>
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<td>Eye contact</td>
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<tr>
<td>: Take off the contact lens if possible</td>
</tr>
<tr>
<td>: Consult medical advice depending on the symptoms.</td>
</tr>
<tr>
<td>Skin contact</td>
</tr>
<tr>
<td>: Wash skin.</td>
</tr>
<tr>
<td>: Consult medical advice depending on the symptoms.</td>
</tr>
<tr>
<td>: Thoroughly clean and dry contaminated clothing and shoes before reuse.</td>
</tr>
<tr>
<td>Ingestion</td>
</tr>
<tr>
<td>: Rinse mouth, give plenty of water to dilute. No specific intervention is indicated as compound is not likely to be hazardous by ingestion.</td>
</tr>
<tr>
<td>: Consult medical advice depending on the symptoms.</td>
</tr>
<tr>
<td>Inhalation</td>
</tr>
<tr>
<td>: Due to its low vapor pressure inhalation is unlikely at room temperature.</td>
</tr>
<tr>
<td>: If not feeling well, move to an area of fresh air and rest.</td>
</tr>
<tr>
<td>: Consult medical advice depending on the symptoms.</td>
</tr>
</tbody>
</table>

5. Firefighting measures

<table>
<thead>
<tr>
<th>Extinguishing media</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regular dry chemical, carbon dioxide, water, regular foam</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Special hazards arising from the substance or mixture</th>
</tr>
</thead>
<tbody>
<tr>
<td>No further relevant information available.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Advice for firefighters</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stay upwind and keep out of low areas and avoid inhalation of material or combustion by-products.</td>
</tr>
<tr>
<td>Wear suitable protective equipment.</td>
</tr>
</tbody>
</table>
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 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]

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>OSHA</th>
<th>ACGIH</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,2–Ethanediol</td>
<td>-</td>
<td>(STEL)100mg/m3</td>
</tr>
</tbody>
</table>

[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 : Violet
State : Liquid
Odor : No information available.
PH : about 8.3
Boiling point : No information available.[Water 100°C]
Melting point : No information available.
<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash point</td>
<td>No information available</td>
</tr>
<tr>
<td>Autoignition temperature</td>
<td>No information available[Additive 97°C]</td>
</tr>
<tr>
<td>Explosion limits</td>
<td>No information available</td>
</tr>
<tr>
<td>Vapor density (air=1)</td>
<td>No information available</td>
</tr>
<tr>
<td>Density</td>
<td>about 1.1</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>soluble</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No information available</td>
</tr>
<tr>
<td>Volatile</td>
<td>&gt;90%</td>
</tr>
</tbody>
</table>

[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**
    - 1,2-Ethanediol: Category 3

  - **Serious eye damage/Eye irritation**
    - 1,2-Ethanediol: Category 2B
    - Additive: Category 2A

  - **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)
   1,2-Ethanediol : Category1

Specific target organ systemic toxicity (repeated exposure)
   1,2-Ethanediol : 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 caution 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”

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.
SAFETY DATA SHEET

1. Product and Company Identification

[Product name] UM-120 Pink
[File No.] 304169E
[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: 03-3458-6281
Telefax number: 03-3450-0363

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 : Category2
Respiratory sensitizer : Classification not possible
Skin sensitizer : Category1
Germ cell mutagenicity : Classification not possible
Carcinogenicity : Classification not possible
Toxic to reproduction : Category2
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) : Category3
Hazard to the Aquatic Environment (Chronic) : Classification not possible

[Label elements]
Pictogram
Signal Word : Danger
Hazard Statement :
- Causes mild skin irritation
- Causes serious eye damage
- May cause an allergic skin reaction
- Suspected of damaging fertility or the unborn child
- Causes damage to organs
- Causes damage to organs through prolonged or repeated exposure
- Harmful to aquatic life

Precautionary Statement
1. Identification

[Product identification]

[Other hazards]

No information available.

2. Safety precautions and first aid measures

[Precautions to be taken when using the product]

Do not breathe dust/vapours etc.
Do not eat, drink or smoke when using this product.
Avoid release to the environment.
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 IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
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.
If eye irritation persists: Get medical advice/attention.
Dispose in accordance with all current regulations and standards.

[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.

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 1.1g)

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>Cas No.</th>
<th>Concentration range (wt%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1,2-Ethanediol</td>
<td>107-21-1</td>
<td>10-30</td>
</tr>
<tr>
<td>Glycerine</td>
<td>56-81-5</td>
<td>10-30</td>
</tr>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>10-30</td>
</tr>
<tr>
<td>Coloring agent</td>
<td>Trade secret</td>
<td>10-30</td>
</tr>
<tr>
<td>Triethanolamine</td>
<td>102-71-6</td>
<td>&lt;10</td>
</tr>
<tr>
<td>Additive</td>
<td>Trade secret</td>
<td>&lt;10</td>
</tr>
<tr>
<td>Resin</td>
<td>Trade secret</td>
<td>&lt;10</td>
</tr>
</tbody>
</table>

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.

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 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]

<table>
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<th>Chemical name</th>
<th>OSHA</th>
<th>ACGIH</th>
</tr>
</thead>
<tbody>
<tr>
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<td>–</td>
<td>(STEL)100mg/m³</td>
</tr>
<tr>
<td>Glycerine</td>
<td>–</td>
<td>(TWA)10mg/m³</td>
</tr>
<tr>
<td>Triethanolamine</td>
<td>–</td>
<td>(TWA)5mg/m³</td>
</tr>
</tbody>
</table>
9. Physical and chemical properties

[Information on basic physical and chemical properties]
- Color: Pink
- State: Liquid
- Odor: No information available.
- pH: No information available.
- Boiling point: No information available. [Water 100℃]
- Melting point: No information available.
- Flash point: No information available. [Additive 97℃]
- Autoignition temperature: No information available. [Additive 306℃]
- Explosion limits: No information available.
- Vapor density (air=1): No information available.
- Density: No information available.
- 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
- 1,2-Ethanediol: Category 3
- Triethanolamine: Category 2

Serious eye damage/Eye Irritation
- 1,2-Ethanediol: Category 2B
- Triethanolamine: Category 2A
- Additive: Category 2A

Respiratory sensitizer
No information available.

Skin sensitizer
- Triethanolamine: Category 1

Germ cell mutagenicity
No information available.

Carcinogenicity
No information available.

Toxic to reproduction
- Additive: Category 2

Specific target organ systemic toxicity (single exposure)
- 1,2-Ethanediol: Category 1

Specific target organ systemic toxicity (repeated exposure)
- 1,2-Ethanediol: Category 1

Aspiration hazard
No information available.

Hazard to the Aquatic Environment (Acute)
- 1,2-Ethanediol: Category 3

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.

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