SAFETY DATA SHEET

1. Product and Company Identification

[Product name] PWE-5M White

[File No.] 100230E [Date of issue] 2014/10/29

[Details of Manufacture]

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

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

Telephone number: (Only office hour are available.)

03-3458-6281 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 : 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) : Not classified
Hazard to the Aquatic Environment (Chronic) : Not classified

[Label elements]

Pictogram :



Signal Word : Danger

Hazard Statement : Causes serious eye damage

: May cause generic 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

: 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 easys 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 6.8g]
Chemical name	Cas No.	Concentration range(wt%)
water	7732-18-5	50-80
Titanium dioxide	13463-67-7	10-30
Ethanol	64-17-5	<10
1,2-Ethanediol	107-21-1	<10
Additive	Trade secret	<10
Resin	Trade secret	<10
Silica (amorphous)	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

: Take a medical advice depending on a symptom.

Skin contact : Wash skin.

: Take a medical advice depending on a symptom.

: 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.

: Take a medical advice depending on a symptom.

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

: If feels unwell, move to the place of fresh air and rest quietly.

: Take a medical advice depending on a symptom.

[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 availble.

[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]

Set a rope in the place that leaked and prohibit an entrance except the

person concerned.

Wear a tool for appropriate protection in the case of the work.

Don't work in windward.

[Environmental precautions] Collect in an empty container after having led an outflow to an end, the

safe place with the earth and sand.

Don't allow 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]

Don't lick nor swallow the ink.

Avoid contact with skin and eyes.

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

[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
Ethanol	-	(TWA)1000ppm
1,2-Ethanediol	-	(STEL)100mg/m3

[Exposure controls]

Protective equipment : Not required.

Respiratory protection : Not required.

Hands protection : Not required.

Eye protection : Not required.

Skin protection : Not required.

9. Physical and chemical properties

[Imformation on basic physical and chemical properties]

Color : White State : Liquid

Odor : No information available.

pH : about 8.0

Boiling point : No information available.[water 100°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 1.3

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

Volatile : 65∼68%

[Other information] No information available.

10. Stability and reactivity

[Chemical stability] This mixture is stability 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

Titanium dioxide : Category2B
Ethanol : Category2A
1,2-Ethanediol : Category2B
Additive : Category2A

Respiratory sensitizer

No information available.

Skin sensitizer

No information available.

Germ cell mutagenicity

Ethanol : Category1B

Carcinogenicity

Additive : Category2

Toxic to reproduction

Ethanol : Category1A Additive : Category2

Specific target organ systemic toxicity(single exposure)

Titanium dioxide : Category3
1,2-Ethanediol : Category1
Additive : Category1

Specific target organ systemic toxicity(repeated exposure)

Titanium dioxide : Category1
Ethanol : Category1
1,2-Ethanediol : Category1
Additive : Category2

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]

Disposal in accordance with all current regulations and standards.

Do not flow out into the drainages with waste fluid.

14. Transport information

[Environmental hazards] No information available.

[HS Code] 960820

[Special precautions for user] Check the container has no leakage. Load a cargo without a fall or

damage, and take care of not collapsing sure.

15. Regulatory information

TSCA: Listed on the TSCA inventory or polymer substance.

[Chemical safety assessment]

Ink or lead are manufactured inaccordance 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] PWE-5M Light blue

[File No.] 100235E [Date of issue] 2014/10/29

[Details of Manufacture]

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

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

Telephone number: (Only office hour are available.)

03-3458-6281 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 : 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) : Not classified
Hazard to the Aquatic Environment (Chronic) : Not classified

[Label elements]

Pictogram :



Signal Word : Danger

Hazard Statement : Causes serious eye damage

: May cause generic 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

: 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 easys 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 6.6g]
Chemical name	Cas No.	Concentration range(wt%)
Water	7732-18-5	50-80
Titanium dioxide	13463-67-7	10-30
Additive	Trade secret	10-30
1,2-Ethanediol	107-21-1	<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.

[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

1,2-Ethanediol - (STEL)100mg/m3

[Exposure controls]

Protective equipment : Not required.

Respiratory protection : Not required.

Hands protection : Not required.

Eye protection : Not required.

Skin protection : Not required.

9. Physical and chemical properties

[Imformation on basic physical and chemical properties]

Color : Light blue State : Liquid

Odor : No information available.

pH : about 8.0

Boiling point : No information available.[Water 100°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

No information available.

Serious eye damage/Eye Irritation

Titanium dioxide : Category2B

1,2-Ethanediol : Category2B

Additive : Category2A

Respiratory sensitizer

No information available.

Skin sensitizer

No information available.

Germ cell mutagenicity

Additive : Category1B

Carcinogenicity

Additive : Category2

Toxic to reproduction

Additive : Category1A

Specific target organ systemic toxicity(single exposure)

Titanium dioxide : Category3
1,2-Ethanediol : Category1

Specific target organ systemic toxicity(repeated exposure)

Titanium dioxide : Category1

1,2-Ethanediol : Category1

Additive : Category1

Aspiration hazard

No information available.

Hazard to the Aquatic Environment (Acute)

No information available.

Hazard to the Aquatic Environment (Chronic)

No information available.

12. Ecological information

No information available.

13. Disposal considerations

[Waste treatment methods]

Dispose in accordance with all current regulations and standards.

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

14. Transport information

[Environmental hazards] No information available.

[HS Code] 960820

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

or incurring damage, and take causion against collapse of container.

15. Regulatory information

TSCA: Listed on the TSCA inventory or polymer substance.

[Chemical safety assessment]

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

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] PWE-5M Violet

[File No.] 100237E [Date of issue] 2014/10/29

[Details of Manufacture]

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

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

telefax number:

Telephone number: (Only office hour are available.)

03-3458-6281

03-3450-0363

[Date of issue]: 2014/10/29

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 : Not classified Acute toxicity(skin) 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 : Category1 Carcinogenicity : Category2 Toxic to reproduction : Category1 Specific target organ systemic toxicity(single exposure) : Category1 Specific target organ systemic toxicity(repeated exposure) : Category1 : Not classified Aspiration hazard

ENVIRONMENTAL HAZARDS

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

[Label elements]

Pictogram





Signal Word : Danger

Hazard Statement : Causes serious eye damage

> : May cause generic 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

: 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 easys 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 6.1g]	
Chemical name	Cas No.	Concentration range(wt%)	
Water	7732-18-5	50-80	
1,2-Ethanediol	107-21-1	<10	
Titanium dioxide	13463-67-7	<10	
Additive	Trade secret	<10	
Coloring agent	Trade secret	<10	
Resin	Trade secret	<10	
Polyethylene glycol nonylphenyl ether	9016-45-9	<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.

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.

[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

1,2-Ethanediol - (STEL)100mg/m3

[Exposure controls]

Protective equipment : Not required.

Respiratory protection : Not required.

Hands protection : Not required.

Eye protection : Not required.

Skin protection : Not required.

9. Physical and chemical properties

[Imformation on basic physical and chemical properties]

Color : Violet 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.

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

No information available.

Serious eye damage/Eye Irritation

Titanium dioxide : Category2B 1,2-Ethanediol : Category2B

Respiratory sensitizer

No information available.

Skin sensitizer

No information available.

Germ cell mutagenicity

Additive : Category1B

Carcinogenicity

Additive : Category2

Toxic to reproduction

Polyethylene glycol nonylphenyl : Category2

ether

Additive : Category1A

Specific target organ systemic toxicity(single exposure)

1,2-Ethanediol : Category1

Specific target organ systemic toxicity(repeated exposure)

Titanium dioxide : 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] 960820

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

or incurring damage, and take causion against collapse of container.

15. Regulatory information

TSCA: Listed on the TSCA inventory or polymer substance.

[Chemical safety assessment]

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

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] PWE-5M Fluorescent-pink

[File No.] 100234E [Date of issue] 2014/10/29

[Details of Manufacture]

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

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

Telephone number: 03-3458-62 (Only office hour are available.)

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 : Category1

Carcinogenicity : Classification not possible

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) : Not classified
Hazard to the Aquatic Environment (Chronic) : Not classified

[Label elements]

Pictogram :



Signal Word : Danger

Hazard Statement : Causes serious eye damage

: May cause generic defects

: May damage 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 easys 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 6.1g]	
Chemical name	Cas No.	Concentration range(wt%)	
Water	7732-18-5	50-80	
Additive	Trade secret	10-30	
Resin	Trade secret	10-30	
1,2-Ethanediol	107-21-1	<10	
Titanium dioxide	13463-67-7	<10	
Polyethylene glycol nonylphenyl ether	9016-45-9	<1	
Coloring agent	Trade secret	<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.

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.

[Conditions for safe storage, including any incompatibilities]

Keep away from oxidizing materials, ignition sources, high temperature

and direct sunlight.

Recommended temperature : $0-40^{\circ}C$

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

8. Exposure controls/personal protection

[Control parameters]

Chemical name OSHA ACGIH

Titanium dioxide - (TWA)10mg/m3

1,2-Ethanediol - (STEL)100mg/m3

[Exposure controls]

Protective equipment : Not required.

Respiratory protection : Not required.

Hands protection : Not required.

Eye protection : Not required.

Skin protection : Not required.

9. Physical and chemical properties

[Imformation on basic physical and chemical properties]

Color : Pink
State : Liquid
Odor : slight odor
pH : about 8.0

Boiling point : No information available.[Water 100°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 : >50%

[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

Titanium dioxide : Category2B 1,2-Ethanediol : Category2B

Respiratory sensitizer

No information available.

Skin sensitizer

No information available.

Germ cell mutagenicity

Additive : Category1B

Carcinogenicity

No information available.

Toxic to reproduction

Polyethylene glycol nonylphenyl : Category2

ether

Additive : Category1A

Specific target organ systemic toxicity(single exposure)

1,2-Ethanediol : Category1

Specific target organ systemic toxicity(repeated exposure)

Titanium dioxide : 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] 960820

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

or incurring damage, and take causion against collapse of container.

15. Regulatory information

TSCA: Listed on the TSCA inventory or polymer substance.

[Chemical safety assessment]

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

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] PWE-5M Red

[File No.] 100233E [Date of issue] 2014/10/29

[Details of Manufacture]

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

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

Telephone number: (Only office hour are available.)

03-3458-6281

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 : 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) : Not classified
Hazard to the Aquatic Environment (Chronic) : Not classified

[Label elements]

Pictogram





Signal Word : Danger

Hazard Statement : Causes serious eye damage

: May cause generic 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

: 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 easys 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 6.2g]
Chemical name	Cas No.	Concentration range(wt%)
Water	7732-18-5	50-80
Titanium dioxide	13463-67-7	10-30
1,2-Ethanediol	107-21-1	<10
Additive	Trade secret	<10
Coloring agent	Trade secret	<10
Resin	Trade secret	<10

4. First aid measures

[Description of first aid measures]

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

: Take off the contact lens if possible

: Consult medical advice depending on the symptoms.

Skin contact : Wash skin.

: Consult medical advice depending on the symptoms.

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

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

indicated as compound is not likely to be hazardous by ingestion.

: Consult medical advice depending on the symptoms.

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

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

: Consult medical advice depending on the symptoms.

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

No information available.

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

No information available.

5. Firefighting measures

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

[Special hazards arising from the substance or mixture]

No further relevant information available.

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

combustion by-products.

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.

[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

1,2-Ethanediol - (STEL)100mg/m3

[Exposure controls]

Protective equipment : Not required.

Respiratory protection : Not required.

Hands protection : Not required.

Eye protection : Not required.

Skin protection : Not required.

9. Physical and chemical properties

[Imformation on basic physical and chemical properties]

Color : Red 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.
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

No information available.

Serious eye damage/Eye Irritation

Titanium dioxide : Category2B
1,2-Ethanediol : Category2B
Additive : Category2A

Respiratory sensitizer

No information available.

Skin sensitizer

No information available.

Germ cell mutagenicity

Additive : Category1B

Carcinogenicity

Additive : Category2

Toxic to reproduction

Additive : Category1A

Specific target organ systemic toxicity(single exposure)

1,2-Ethanediol : Category1

Specific target organ systemic toxicity(repeated exposure)

Titanium dioxide : Category1
1,2-Ethanediol : Category1
Additive : Category1

Aspiration hazard

No information available.

Hazard to the Aquatic Environment (Acute)

No information available.

Hazard to the Aquatic Environment (Chronic)

No information available.

12. Ecological information

No information available.

13. Disposal considerations

[Waste treatment methods]

Dispose in accordance with all current regulations and standards.

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

14. Transport information

[Environmental hazards] No information available.

[HS Code] 960820

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

or incurring damage, and take causion against collapse of container.

15. Regulatory information

TSCA: Listed on the TSCA inventory or polymer substance.

[Chemical safety assessment]

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

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] PWE-5M Fluorescent-orange

[File No.] 100232E [Date of issue] 2014/10/29

[Details of Manufacture]

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

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

Telephone number: (Only office hour are available.)

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

[Date of issue]: 2014/10/29

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 : Category1

Carcinogenicity : Classification not possible

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) : Not classified
Hazard to the Aquatic Environment (Chronic) : Not classified

[Label elements]

Pictogram :



Signal Word : Danger

Hazard Statement : Causes serious eye damage

: May cause generic defects

: May damage 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 easys 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 6.4g]
Chemical name	Cas No.	Concentration range(wt%)
Water	7732-18-5	50-80
Additive	Trade secret	10-30
Resin	Trade secret	10-30
1,2-Ethanediol	107-21-1	<10
Titanium dioxide	13463-67-7	<10
Coloring agent	Trade secret	<10
Polyethylene glycol nonylphenyl ether	9016-45-9	<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.

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.

[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

1,2-Ethanediol - (STEL)100mg/m3

[Exposure controls]

Protective equipment : Not required.

Respiratory protection : Not required.

Hands protection : Not required.

Eye protection : Not required.

Skin protection : Not required.

9. Physical and chemical properties

[Imformation on basic physical and chemical properties]

Color : Orange
State : Liquid
Odor : slight odor
pH : about 8.0

Boiling point : No information available.[Water 100°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 : >50%

[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

Titanium dioxide : Category2B 1,2-Ethanediol : Category2B

Respiratory sensitizer

No information available.

Skin sensitizer

No information available.

Germ cell mutagenicity

Additive : Category1B

Carcinogenicity

No information available.

Toxic to reproduction

Polyethylene glycol nonylphenyl : Category2

ether

Additive : Category1A

Specific target organ systemic toxicity(single exposure)

1,2-Ethanediol : Category1

Specific target organ systemic toxicity(repeated exposure)

Titanium dioxide : 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] 960820

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

or incurring damage, and take causion against collapse of container.

15. Regulatory information

TSCA: Listed on the TSCA inventory or polymer substance.

[Chemical safety assessment]

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

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] PWE-5M Fluorescent-yellow

[File No.] 100231E [Date of issue] 2014/10/29

[Details of Manufacture]

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

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

Telephone number: (Only office hour are available.)

03-3458-6281 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 : Category1

Carcinogenicity : Classification not possible

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) : Not classified
Hazard to the Aquatic Environment (Chronic) : Not classified

[Label elements]

Pictogram :





Signal Word : Danger

Hazard Statement : Causes serious eye damage

: May cause generic defects

: May damage 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 easys 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 6.4g]
Chemical name	Cas No.	Concentration range(wt%)
Water	7732-18-5	50-80
Additive	Trade secret	10-30
Resin	Trade secret	10-30
1,2-Ethanediol	107-21-1	<10
Titanium dioxide	13463-67-7	<10
Coloring agent	Trade secret	<10
Polyethylene glycol nonylphenyl ether	9016-45-9	<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.

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.

[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

1,2-Ethanediol - (STEL)100mg/m3

[Exposure controls]

Protective equipment : Not required.

Respiratory protection : Not required.

Hands protection : Not required.

Eye protection : Not required.

Skin protection : Not required.

9. Physical and chemical properties

[Imformation on basic physical and chemical properties]

Color : Yellow State : Liquid

Odor : No information available.

pH : about 8.0

Boiling point : No information available.[Water 100°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 : >50%

[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]
 [Hazardous decomposition products]
 [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

Titanium dioxide : Category2B 1,2-Ethanediol : Category2B

Respiratory sensitizer

No information available.

Skin sensitizer

No information available.

Germ cell mutagenicity

Additive : Category1B

Carcinogenicity

No information available.

Toxic to reproduction

Polyethylene glycol nonylphenyl : Category2

ether

Additive : Category1A

Specific target organ systemic toxicity(single exposure)

1,2-Ethanediol : Category1

Specific target organ systemic toxicity(repeated exposure)

Titanium dioxide : 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] 960820

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

or incurring damage, and take causion against collapse of container.

15. Regulatory information

TSCA: Listed on the TSCA inventory or polymer substance.

[Chemical safety assessment]

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

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] PWE-5M Fluorescent-green

[File No.] 100236E [Date of issue] 2014/10/29

[Details of Manufacture]

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

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

Telephone number: (Only office hour are available.)

03-3458-6281 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 : 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) : Not classified
Hazard to the Aquatic Environment (Chronic) : Not classified

[Label elements]

Pictogram :



Signal Word : Danger

Hazard Statement : Causes serious eye damage

: May cause generic 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

: 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 easys 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 6.6g]	
Chemical name	Cas No.	Concentration range(wt%)	
Water	7732-18-5	50-80	
Additive	Trade secret	10-30	
Resin	Trade secret	10-30	
1,2-Ethanediol	107-21-1	<10	
Titanium dioxide	13463-67-7	<10	
Coloring agent	Trade secret	<10	
Polyethylene glycol nonylphenyl	9016-45-9	<1	

4. First aid measures

ether

[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.

[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

1,2-Ethanediol - (STEL)100mg/m3

[Exposure controls]

Protective equipment : Not required.

Respiratory protection : Not required.

Hands protection : Not required.

Eye protection : Not required.

Skin protection : Not required.

9. Physical and chemical properties

[Imformation on basic physical and chemical properties]

Color : Green State : Liquid

Odor : No information available.

pH : about 8.0

Boiling point : No information available.[Water 100°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 : >50%

[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

Titanium dioxide : Category2B 1,2-Ethanediol : Category2B

Respiratory sensitizer

No information available.

Skin sensitizer

No information available.

Germ cell mutagenicity

Additive : Category1B

Carcinogenicity

Additive : Category2

Toxic to reproduction

Polyethylene glycol nonylphenyl : Category2

ether

Additive : Category1A

Specific target organ systemic toxicity(single exposure)

1,2-Ethanediol : Category1

Specific target organ systemic toxicity(repeated exposure)

Titanium dioxide : 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] 960820

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

or incurring damage, and take causion against collapse of container.

15. Regulatory information

TSCA: Listed on the TSCA inventory or polymer substance.

[Chemical safety assessment]

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

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] PWE-5M Black

[File No.] 100279E [Date of issue] 2014/10/29

[Details of Manufacture]

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

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

Telephone number: (Only office hour are available.)

03-3458-6281 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 : Category2
Serious eye damage/Eye Irritation : Category2

Respiratory sensitizer : Classification not possible

Skin sensitizer : Not classified

Germ cell mutagenicity : Category1B

Carcinogenicity : Category2

Toxic to reproduction : Category1A

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) : Category3

[Label elements]

Pictogram





Signal Word : Danger

Hazard Statement : Causes skin irritation

: Causes serious eye damage: May cause generic 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

: Harmful to aquatic life

: Harmful to aquatic life with long lasting effect

Precautionary Statement

: 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.

: Take off contaminated clothing and wash 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 easys 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 5.0g]
Chemical name	Cas No.	Concentration range(wt%)
Water	7732-18-5	50-80
Carbon black	1333-86-4	10-30
1,2-Ethanediol	107-21-1	<10
Additive	Trade secret	<10
Resin	Trade secret	<10

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 indi

cated 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.

[Conditions for safe storage, including any incompatibilities]

Keep away from oxidizing materials, ignition sources, high temperature

and direct sunlight.

Recommended temperature : 0-40°C

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

8. Exposure controls/personal protection

[Control parameters]

 Chemical name
 OSHA
 ACGIH

 Carbon black
 (TWA)3.5mg/m3

 1,2-Ethanediol
 (STEL)100mg/m3

[Exposure controls]

Protective equipment : Not required.

Respiratory protection : Not required.

Hands protection : Not required.

Eye protection : Not required.

Skin protection : Not required.

9. Physical and chemical properties

[Imformation on basic physical and chemical properties]

Color : Black State : Liquid

Odor : 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.

Autoignition temperature : No information available.

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

Serious eye damage/Eye Irritation

1,2-Ethanediol : Category2B

Respiratory sensitizer

No information available.

Skin sensitizer

No information available.

Germ cell mutagenicity

Additive : Category1B

Carcinogenicity

Carbon black : Category2
Additive : Category2

Toxic to reproduction

Additive : Category1A

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)

1,2-Ethanediol : Category3

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 causion against collapse of container.

15. Regulatory information

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[Chemical safety assessment]

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