SAFETY DATA SHEET

1. Product and Company Identification

[Product name] PX-20/21 Black

[File No.] 202001E 2019/06/24 [Date of issue]

[Details of Manufacture]

SKU Listing: Manufacture's name: MITSUBISHI PENCIL CO., LTD. 63601

63701 Address: 5-23-37, HIGASHIOHI, SHINAGAWA, TOKYO, JAPAN

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

Telephone number: (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

Flammable Liquids : Category2

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 : Classification not possible Germ cell mutagenicity : Classification not possible

Carcinogenicity : Category2 Toxic to reproduction : Category1 Specific target organ systemic toxicity(single exposure) : Category1 Specific target organ systemic toxicity(repeated exposure) : Category1 Aspiration hazard Category1

ENVIRONMENTAL HAZARDS

Hazard to the Aquatic Environment (Acute) : Category2 Hazard to the Aquatic Environment (Chronic) : Category2

[Label elements]

Pictogram









Signal Word Danger

Hazard Statement : Highly flammable liquid and vapour

May be fatal if swallowed and enters airways

: Causes skin irritation

: Causes serious eye damage : Suspected of causing cancer

: May damage fertility or the unborn child

: Causes damage to organs

: Causes damage to organs through prolonged or repeated exposure

: Toxic to aquatic life

: Toxic to aquatic life with long lasting effect

Precautionary Statement

: Keep away from heat/sparks/open flames/hot surfaces. -No smoking.

: Keep cool.

: Ground/bond container and receiving equipment.

: 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.

: Collect spillage.

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

: IF ON SKIN(or hair): Remove immediately all contaminated clothing. Rinse skin with 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.

: In case of fire: Use appropriate means for fire extinguishing in accordance with all current regulations and standards.

: IF SWALLOWED:Get immediate medical advaice/attention.Do NOT induce vomiting

: Store in a well-ventilated place. Keep cool.

: Dispose in accordance with all current regulations and standards.

Mixture

[Other hazards] No information available.

3. Composition/information on ingredients

[The chemical product is a substance or a mixture]

- '	_	
[Chemical nature]	[Component parts] Ink	
Chemical name	Cas No.	Concentration range(wt%)
Xylenes	1330-20-7	30-50
Ethylbenzene	100-41-4	10-30
Isobutyl alcohol	78-83-1	< 10
Oleic acid	112-80-1	< 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: Then get medical attention immediately.

Skin contact : Wash skin.

: Consult medical advice depending on the symptoms.

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

Ingestion : Consult medical advice, and show the SDS to physician.

: Never give anything by mouth. If vomiting occurs, keep head lower than hips to

help prevent asporation.

Inhalation : Remove from exposure area to fresh air immediately. Give artificial respiration if

not breathing.

: Consult medical advice, and show the SDS to physician.

[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 the leeward.

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

containing earth and sand.

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

[Methods and material for containment and cleaning up]

Wipe off by dry cloth and wash with water.

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

regulations.

[Reference to other sections] No information available.

7. Handling and storage

[Precautions for safe handling]

Do not lick or swallow the ink.

Avoid contact with skin and eyes.

Ventilate the room in case of using and don't breathe the vapor.

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

[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
Isobutyl alcohol - (TWA)50ppm

Xylenes - (TWA)100ppm (STEL)150ppm

[Exposure controls]

Protective equipment : Ventilate the room in case of using it and don't

breathe the vapor. Do mechanical exhaust as needed.

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 : Aromatic odor

pH : No information available.

Boiling point : No information available.[Isobutyl alcohol 107.9°C]

Melting point : No information available.

Flash point : No information available.[Ethylbenzene 18.0°C]
Autoignition temperature : No information available.[Isobutyl alcohol 415.0°C]

Explosion limits : No information available.

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

Density : about 0.9
Solubility in water : insoluble

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 : >5000 mg/kg (estimate value)

Acute toxicity(skin)

Not classified : >5000 mg/kg (estimate value)

Acute toxicity(inhalation:vapours)

Not classified : >50 mg/L (estimate value)

Skin corrosion/irritation

Isobutyl alcohol : Category2

Xylenes : Category2

Ethylbenzene : Category3

Serious eye damage/Eye Irritation

Isobutyl alcohol : Category2A

Xylenes : Category2A

Ethylbenzene : Category2B

Respiratory sensitizer

No information available.

Skin sensitizer

No information available.

Germ cell mutagenicity

No information available.

Carcinogenicity

Ethylbenzene : Category2

Toxic to reproduction

Xylenes : Category1B Ethylbenzene : Category1B

Specific target organ systemic toxicity(single exposure)

Xylenes : Category1
Ethylbenzene : Category2

Specific target organ systemic toxicity(repeated exposure)

Xylenes : Category1

Aspiration hazard

Isobutyl alcohol: Category2Xylenes: Category2Ethylbenzene: Category1

Hazard to the Aquatic Environment (Acute)

Xylenes : Category2
Ethylbenzene : Category1

Hazard to the Aquatic Environment (Chronic)

Xylenes : Category2

12. Ecological information

[Results of PBT and vPvB assessment]

No information available.

[Other adverse effects] 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

Information of this section is about the ink.

[Safety, health and environmental regulations/legislation specific for the substance or mixture]

Follow all regulation in your country.

[Chemical safety assessment]

Ink or lead are manufactured in accordance with "ISO 8124-3:2010 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] PX-20/21 Blue

[File No.] 202002E 2019/06/24 [Date of issue]

[Details of Manufacture]

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

63602 63703 Address: 5-23-37, HIGASHIOHI, SHINAGAWA, TOKYO, JAPAN

> Telephone number: (Only office hour are available.) 03-3458-6281 03-3450-0363 telefax number:

2. Hazards identification

Information of this section is about the ink. [Classification of the substance or mixture]

PHYSICO-CHEMICAL HAZARDS

Flammable Liquids : Category2

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 : Classification not possible Germ cell mutagenicity : Classification not possible

Carcinogenicity : Category2 Toxic to reproduction : Category1 Specific target organ systemic toxicity(single exposure) : Category1 Specific target organ systemic toxicity(repeated exposure) : Category1 Aspiration hazard : Category2

ENVIRONMENTAL HAZARDS

Hazard to the Aquatic Environment (Acute) : Category2 Hazard to the Aquatic Environment (Chronic) : Category2

[Label elements]

Pictogram









Signal Word Danger

Hazard Statement : Highly flammable liquid and vapour

May be harmful if swallowed and enters airways

: Causes skin irritation

: Causes serious eye damage : Suspected of causing cancer

: May damage fertility or the unborn child

: Causes damage to organs

: Causes damage to organs through prolonged or repeated exposure

: Toxic to aquatic life

: Toxic to aquatic life with long lasting effect

Precautionary Statement

: Keep away from heat/sparks/open flames/hot surfaces. -No smoking.

: Keep cool.

: Ground/bond container and receiving equipment.

: 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.

: Collect spillage.

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

: IF ON SKIN(or hair): Remove immediately all contaminated clothing. Rinse skin with 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.

In case of fire: Use appropriate means for fire extinguishing in accordance with all current regulations and standards.

: IF SWALLOWED:Get immediate medical advaice/attention.Do NOT induce vomiting

: Store in a well-ventilated place. Keep cool.

: 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

Chemical name Cas No. Concentration range(wt%)

 Xylenes
 1330-20-7
 30-50

 Titanium dioxide
 13463-67-7
 10-30

 Ethylbenzene
 100-41-4
 < 10</td>

4. First aid measures

[Description of first aid measures]

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

: Take off the contact lens if possible: Then get medical attention immediately.

Skin contact : Wash skin.

: Consult medical advice depending on the symptoms.

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

Ingestion : Consult medical advice, and show the SDS to physician.

: Never give anything by mouth. If vomiting occurs, keep head lower than hips to

help prevent asporation.

Inhalation : Remove from exposure area to fresh air immediately. Give artificial respiration if

not breathing.

: Consult medical advice, and show the SDS to physician.

[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 the leeward.

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

containing earth and sand.

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

[Methods and material for containment and cleaning up]

Wipe off by dry cloth and wash with water.

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

regulations.

[Reference to other sections] No information available.

7. Handling and storage

[Precautions for safe handling]

Do not lick or swallow the ink.

Avoid contact with skin and eyes.

Ventilate the room in case of using and don't breathe the vapor.

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

[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

 Xylenes
 (TWA)100ppm (STEL)150ppm

[Exposure controls]

Protective equipment : Ventilate the room in case of using it and don't

breathe the vapor. Do mechanical exhaust as needed.

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 : Aromatic odor

pH : No information available.

Boiling point : No information available.[Ethylbenzene 136.0°C]

Melting point : No information available.

Flash point : No information available.[Ethylbenzene 18.0°C]
Autoignition temperature : No information available.[Ethylbenzene 432.0°C]

Explosion limits : No information available.

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

Density : about 1.3
Solubility in water : insoluble

Evaporation rate : No information available.

Volatile : >40%

[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 : >5000 mg/kg (estimate value)

Acute toxicity(skin)

Not classified : >5000 mg/kg (estimate value)

Acute toxicity(inhalation:vapours)

Not classified : >50 mg/L (estimate value)

Skin corrosion/irritation

Xylenes : Category2 Ethylbenzene : Category3

Serious eye damage/Eye Irritation

Titanium dioxide : Category2B

Xylenes : Category2A

Ethylbenzene : Category2B

Respiratory sensitizer

No information available.

Skin sensitizer

No information available.

Germ cell mutagenicity

No information available.

Carcinogenicity

Ethylbenzene : Category2

Toxic to reproduction

Xylenes : Category1B Ethylbenzene : Category1B

Specific target organ systemic toxicity(single exposure)

Titanium dioxide : Category3

Xylenes : Category1

Ethylbenzene : Category2

Specific target organ systemic toxicity(repeated exposure)

Titanium dioxide : Category1

Xylenes : Category1

Aspiration hazard

Xylenes : Category2
Ethylbenzene : Category1

Hazard to the Aquatic Environment (Acute)

Xylenes : Category2
Ethylbenzene : Category1

Hazard to the Aquatic Environment (Chronic)

Titanium dioxide : Category4

Xylenes : Category2

12. Ecological information

[Results of PBT and vPvB assessment]

No information available.

[Other adverse effects] 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

Information of this section is about the ink.

[Safety, health and environmental regulations/legislation specific for the substance or mixture]

Follow all regulation in your country.

[Chemical safety assessment]

Ink or lead are manufactured in accordance with "ISO 8124-3:2010 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] PX-20/21 Green

[File No.] 202011E 2019/06/24 [Date of issue]

[Details of Manufacture]

SKU Listing: Manufacture's name: MITSUBISHI PENCIL CO., LTD. 63604

63704 Address: 5-23-37, HIGASHIOHI, SHINAGAWA, TOKYO, JAPAN

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

Telephone number: (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

Flammable Liquids : Category2

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 : Classification not possible Germ cell mutagenicity : Classification not possible

Carcinogenicity : Category2 Toxic to reproduction : Category1 Specific target organ systemic toxicity(single exposure) : Category1 Specific target organ systemic toxicity(repeated exposure) : Category1 Aspiration hazard : Category2

ENVIRONMENTAL HAZARDS

Hazard to the Aquatic Environment (Acute) : Category2 Hazard to the Aquatic Environment (Chronic) Category2

[Label elements]

Pictogram









Signal Word Danger

Hazard Statement : Highly flammable liquid and vapour

May be harmful if swallowed and enters airways

: Causes skin irritation

: Causes serious eye damage : Suspected of causing cancer

: May damage fertility or the unborn child

: Causes damage to organs

: Causes damage to organs through prolonged or repeated exposure

: Toxic to aquatic life

: Toxic to aquatic life with long lasting effect

Precautionary Statement

: Keep away from heat/sparks/open flames/hot surfaces. -No smoking.

: Keep cool.

: Ground/bond container and receiving equipment.

: 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.

: Collect spillage.

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

: IF ON SKIN(or hair): Remove immediately all contaminated clothing. Rinse skin with 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.

In case of fire: Use appropriate means for fire extinguishing in accordance with all current regulations and standards.

 IF SWALLOWED:Get immediate medical advaice/attention.Do NOT induce vomiting.

: Store in a well-ventilated place. Keep cool.

: 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

Chemical name Cas No. Concentration range(wt%)

 Titanium dioxide
 13463-67-7
 30-50

 Xylenes
 1330-20-7
 30-50

 Ethylbenzene
 100-41-4
 < 10</td>

4. First aid measures

[Description of first aid measures]

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

: Take off the contact lens if possible: Then get medical attention immediately.

Skin contact : Wash skin.

: Consult medical advice depending on the symptoms.

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

Ingestion : Consult medical advice, and show the SDS to physician.

: Never give anything by mouth. If vomiting occurs, keep head lower than hips to

help prevent asporation.

Inhalation : Remove from exposure area to fresh air immediately. Give artificial respiration if

not breathing.

: Consult medical advice, and show the SDS to physician.

[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 the leeward.

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

containing earth and sand.

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

[Methods and material for containment and cleaning up]

Wipe off by dry cloth and wash with water.

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

regulations.

[Reference to other sections] No information available.

7. Handling and storage

[Precautions for safe handling]

Do not lick or swallow the ink.

Avoid contact with skin and eyes.

Ventilate the room in case of using and don't breathe the vapor.

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

[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

 Xylenes
 (TWA)100ppm (STEL)150ppm

[Exposure controls]

Protective equipment : Ventilate the room in case of using it and don't

breathe the vapor. Do mechanical exhaust as needed.

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 : Aromatic odor

pH : No information available.

Boiling point : No information available.[Ethylbenzene 136.0°C]

Melting point : No information available.

Flash point : No information available.[Ethylbenzene 18.0°C]
Autoignition temperature : No information available.[Ethylbenzene 432.0°C]

Explosion limits : No information available.

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

Density : about 1.3
Solubility in water : insoluble

Evaporation rate : No information available.

Volatile : >40%

[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 : >5000 mg/kg (estimate value)

Acute toxicity(skin)

Not classified : >5000 mg/kg (estimate value)

Acute toxicity(inhalation:vapours)

Not classified : >50 mg/L (estimate value)

Skin corrosion/irritation

Xylenes : Category2
Ethylbenzene : Category3

Serious eye damage/Eye Irritation

Titanium dioxide : Category2B

Xylenes : Category2A

Ethylbenzene : Category2B

Respiratory sensitizer

No information available.

Skin sensitizer

No information available.

Germ cell mutagenicity

No information available.

Carcinogenicity

Ethylbenzene : Category2

Toxic to reproduction

Xylenes : Category1B Ethylbenzene : Category1B

Specific target organ systemic toxicity(single exposure)

Titanium dioxide : Category3

Xylenes : Category1

Ethylbenzene : Category2

Specific target organ systemic toxicity(repeated exposure)

Titanium dioxide : Category1 Xylenes : Category1 Aspiration hazard

Xylenes : Category2
Ethylbenzene : Category1

Hazard to the Aquatic Environment (Acute)

Xylenes : Category2
Ethylbenzene : Category1

Hazard to the Aquatic Environment (Chronic)

Titanium dioxide : Category4

Xylenes : Category2

12. Ecological information

[Results of PBT and vPvB assessment]

No information available.

[Other adverse effects] 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

Information of this section is about the ink.

[Safety, health and environmental regulations/legislation specific for the substance or mixture]

Follow all regulation in your country.

[Chemical safety assessment]

Ink or lead are manufactured in accordance with "ISO 8124-3:2010 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] PX-20/21 Red

[File No.] 202003E 2019/06/24 [Date of issue]

[Details of Manufacture]

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

63602 63702 Address: 5-23-37, HIGASHIOHI, SHINAGAWA, TOKYO, JAPAN

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

Telephone number: (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

Flammable Liquids : Category2

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 : Classification not possible Germ cell mutagenicity : Classification not possible

Carcinogenicity : Category2 Toxic to reproduction : Category1 Specific target organ systemic toxicity(single exposure) : Category1 Specific target organ systemic toxicity(repeated exposure) : Category1 Aspiration hazard : Category2

ENVIRONMENTAL HAZARDS

Hazard to the Aquatic Environment (Acute) : Category2 Hazard to the Aquatic Environment (Chronic) Category2

[Label elements]

Pictogram









Signal Word Danger

Hazard Statement : Highly flammable liquid and vapour

May be harmful if swallowed and enters airways

: Causes skin irritation

: Causes serious eye damage : Suspected of causing cancer

: May damage fertility or the unborn child

: Causes damage to organs

: Causes damage to organs through prolonged or repeated exposure

: Toxic to aquatic life

: Toxic to aquatic life with long lasting effect

Precautionary Statement

: Keep away from heat/sparks/open flames/hot surfaces. -No smoking.

: Keep cool.

: Ground/bond container and receiving equipment.

: 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.

: Collect spillage.

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

: IF ON SKIN(or hair): Remove immediately all contaminated clothing. Rinse skin with 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.

In case of fire: Use appropriate means for fire extinguishing in accordance with all current regulations and standards.

 IF SWALLOWED:Get immediate medical advaice/attention.Do NOT induce vomiting.

: Store in a well-ventilated place. Keep cool.

: 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

Chemical name Cas No. Concentration range(wt%)

 Titanium dioxide
 13463-67-7
 30-50

 Xylenes
 1330-20-7
 30-50

 Ethylbenzene
 100-41-4
 < 10</td>

4. First aid measures

[Description of first aid measures]

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

: Take off the contact lens if possible: Then get medical attention immediately.

Skin contact : Wash skin.

: Consult medical advice depending on the symptoms.

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

Ingestion : Consult medical advice, and show the SDS to physician.

: Never give anything by mouth. If vomiting occurs, keep head lower than hips to

help prevent asporation.

Inhalation : Remove from exposure area to fresh air immediately. Give artificial respiration if

not breathing.

: Consult medical advice, and show the SDS to physician.

[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 the leeward.

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

containing earth and sand.

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

[Methods and material for containment and cleaning up]

Wipe off by dry cloth and wash with water.

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

regulations.

[Reference to other sections] No information available.

7. Handling and storage

[Precautions for safe handling]

Do not lick or swallow the ink.

Avoid contact with skin and eyes.

Ventilate the room in case of using and don't breathe the vapor.

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

[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

 Xylenes
 (TWA)100ppm (STEL)150ppm

[Exposure controls]

Protective equipment : Ventilate the room in case of using it and don't

breathe the vapor. Do mechanical exhaust as needed.

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 : Red State : Liquid

Odor : Aromatic odor

pH : No information available.

Boiling point : No information available.[Ethylbenzene 136.0°C]

Melting point : No information available.

Flash point : No information available.[Ethylbenzene 18.0°C]
Autoignition temperature : No information available.[Ethylbenzene 432.0°C]

Explosion limits : No information available.

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

Density : about 1.3
Solubility in water : insoluble

Evaporation rate : No information available.

Volatile : >40%

[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 : >5000 mg/kg (estimate value)

Acute toxicity(skin)

Not classified : >5000 mg/kg (estimate value)

Acute toxicity(inhalation:vapours)

Not classified : >50 mg/L (estimate value)

Skin corrosion/irritation

Xylenes : Category2
Ethylbenzene : Category3

Serious eye damage/Eye Irritation

Titanium dioxide : Category2B

Xylenes : Category2A

Ethylbenzene : Category2B

Respiratory sensitizer

No information available.

Skin sensitizer

No information available.

Germ cell mutagenicity

No information available.

Carcinogenicity

Ethylbenzene : Category2

Toxic to reproduction

Xylenes : Category1B Ethylbenzene : Category1B

Specific target organ systemic toxicity(single exposure)

Titanium dioxide : Category3

Xylenes : Category1

Ethylbenzene : Category2

Specific target organ systemic toxicity(repeated exposure)

Titanium dioxide : Category1

Xylenes : Category1

Aspiration hazard

Xylenes : Category2
Ethylbenzene : Category1

Hazard to the Aquatic Environment (Acute)

Xylenes : Category2
Ethylbenzene : Category1

Hazard to the Aquatic Environment (Chronic)

Titanium dioxide : Category4

Xylenes : Category2

12. Ecological information

[Results of PBT and vPvB assessment]

No information available.

[Other adverse effects] 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

Information of this section is about the ink.

[Safety, health and environmental regulations/legislation specific for the substance or mixture]

Follow all regulation in your country.

[Chemical safety assessment]

Ink or lead are manufactured in accordance with "ISO 8124-3:2010 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] PX-20/21/30 White

[File No.] 202018E 2019/06/24 [Date of issue]

[Details of Manufacture]

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

63613 63713 Address: 5-23-37, HIGASHIOHI, SHINAGAWA, TOKYO, JAPAN

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

Telephone number: (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

Flammable Liquids : Category2

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 : Classification not possible Germ cell mutagenicity : Classification not possible

Carcinogenicity : Category2 Toxic to reproduction : Category1 Specific target organ systemic toxicity(single exposure) : Category1 Specific target organ systemic toxicity(repeated exposure) : Category1 Aspiration hazard : Category2

ENVIRONMENTAL HAZARDS

Hazard to the Aquatic Environment (Acute) : Category2 Hazard to the Aquatic Environment (Chronic) : Category2

[Label elements]

Pictogram









Signal Word Danger

Hazard Statement : Highly flammable liquid and vapour

May be harmful if swallowed and enters airways

: Causes skin irritation

: Causes serious eye damage : Suspected of causing cancer

: May damage fertility or the unborn child

: Causes damage to organs

: Causes damage to organs through prolonged or repeated exposure

: Toxic to aquatic life

: Toxic to aquatic life with long lasting effect

Precautionary Statement

: Keep away from heat/sparks/open flames/hot surfaces. -No smoking.

: Keep cool.

: Ground/bond container and receiving equipment.

: 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.

: Collect spillage.

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

: IF ON SKIN(or hair): Remove immediately all contaminated clothing. Rinse skin with 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.

In case of fire: Use appropriate means for fire extinguishing in accordance with all current regulations and standards.

 IF SWALLOWED:Get immediate medical advaice/attention.Do NOT induce vomiting.

: Store in a well-ventilated place. Keep cool.

: 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

Chemical name Cas No. Concentration range(wt%)

 Titanium dioxide
 13463-67-7
 30-50

 Xylenes
 1330-20-7
 30-50

 Ethylbenzene
 100-41-4
 < 10</td>

4. First aid measures

[Description of first aid measures]

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

: Take off the contact lens if possible: Then get medical attention immediately.

Skin contact : Wash skin.

: Consult medical advice depending on the symptoms.

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

Ingestion : Consult medical advice, and show the SDS to physician.

: Never give anything by mouth. If vomiting occurs, keep head lower than hips to

help prevent asporation.

Inhalation : Remove from exposure area to fresh air immediately. Give artificial respiration if

not breathing.

: Consult medical advice, and show the SDS to physician.

[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 the leeward.

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

containing earth and sand.

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

[Methods and material for containment and cleaning up]

Wipe off by dry cloth and wash with water.

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

regulations.

[Reference to other sections] No information available.

7. Handling and storage

[Precautions for safe handling]

Do not lick or swallow the ink.

Avoid contact with skin and eyes.

Ventilate the room in case of using and don't breathe the vapor.

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

[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

 Xylenes
 (TWA)100ppm (STEL)150ppm

[Exposure controls]

Protective equipment : Ventilate the room in case of using it and don't

breathe the vapor. Do mechanical exhaust as needed.

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 : White State : Liquid

Odor : Aromatic odor

pH : No information available.

Boiling point : No information available.[Ethylbenzene 136.0°C]

Melting point : No information available.

Flash point : No information available.[Ethylbenzene 18.0°C]
Autoignition temperature : No information available.[Ethylbenzene 432.0°C]

Explosion limits : No information available.

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

Density : about 1.3
Solubility in water : insoluble

Evaporation rate : No information available.

Volatile : >40%

[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 : >5000 mg/kg (estimate value)

Acute toxicity(skin)

Not classified : >5000 mg/kg (estimate value)

Acute toxicity(inhalation:vapours)

Not classified : >50 mg/L (estimate value)

Skin corrosion/irritation

Xylenes : Category2
Ethylbenzene : Category3

Serious eye damage/Eye Irritation

Titanium dioxide : Category2B

Xylenes : Category2A

Ethylbenzene : Category2B

Respiratory sensitizer

No information available.

Skin sensitizer

No information available.

Germ cell mutagenicity

No information available.

Carcinogenicity

Ethylbenzene : Category2

Toxic to reproduction

Xylenes : Category1B Ethylbenzene : Category1B

Specific target organ systemic toxicity(single exposure)

Titanium dioxide : Category3

Xylenes : Category1

Ethylbenzene : Category2

Specific target organ systemic toxicity(repeated exposure)

Titanium dioxide : Category1 Xylenes : Category1 Aspiration hazard

Xylenes : Category2
Ethylbenzene : Category1

Hazard to the Aquatic Environment (Acute)

Xylenes : Category2
Ethylbenzene : Category1

Hazard to the Aquatic Environment (Chronic)

Titanium dioxide : Category4

Xylenes : Category2

12. Ecological information

[Results of PBT and vPvB assessment]

No information available.

[Other adverse effects] 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

Information of this section is about the ink.

[Safety, health and environmental regulations/legislation specific for the substance or mixture]

Follow all regulation in your country.

[Chemical safety assessment]

Ink or lead are manufactured in accordance with "ISO 8124-3:2010 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] PX-20/21 Yellow

[File No.] 202009E 2019/06/24 [Date of issue]

[Details of Manufacture]

SKU Listing: Manufacture's name: MITSUBISHI PENCIL CO., LTD. 63605

Address: 5-23-37, HIGASHIOHI, SHINAGAWA, TOKYO, JAPAN 63705

> Telephone number: (Only office hour are available.) 03-3458-6281 03-3450-0363 telefax number:

2. Hazards identification

Information of this section is about the ink. [Classification of the substance or mixture]

PHYSICO-CHEMICAL HAZARDS

Flammable Liquids : Category2

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 : Classification not possible Germ cell mutagenicity : Classification not possible

Carcinogenicity : Category2 Toxic to reproduction : Category1 Specific target organ systemic toxicity(single exposure) : Category1 Specific target organ systemic toxicity(repeated exposure) : Category1 Aspiration hazard : Category2

ENVIRONMENTAL HAZARDS

Hazard to the Aquatic Environment (Acute) : Category2 Hazard to the Aquatic Environment (Chronic) Category2

[Label elements]

Pictogram









Signal Word Danger

Hazard Statement : Highly flammable liquid and vapour

May be harmful if swallowed and enters airways

: Causes skin irritation

: Causes serious eye damage : Suspected of causing cancer

: May damage fertility or the unborn child

: Causes damage to organs

: Causes damage to organs through prolonged or repeated exposure

: Toxic to aquatic life

: Toxic to aquatic life with long lasting effect

Precautionary Statement

: Keep away from heat/sparks/open flames/hot surfaces. -No smoking.

: Keep cool.

: Ground/bond container and receiving equipment.

: 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.

: Collect spillage.

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

: IF ON SKIN(or hair): Remove immediately all contaminated clothing. Rinse skin with 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.

In case of fire: Use appropriate means for fire extinguishing in accordance with all current regulations and standards.

 IF SWALLOWED:Get immediate medical advaice/attention.Do NOT induce vomiting.

: Store in a well-ventilated place. Keep cool.

: 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

Chemical name Cas No. Concentration range(wt%)

 Titanium dioxide
 13463-67-7
 30-50

 Xylenes
 1330-20-7
 30-50

 Ethylbenzene
 100-41-4
 < 10</td>

4. First aid measures

[Description of first aid measures]

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

: Take off the contact lens if possible: Then get medical attention immediately.

Skin contact : Wash skin.

: Consult medical advice depending on the symptoms.

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

Ingestion : Consult medical advice, and show the SDS to physician.

: Never give anything by mouth. If vomiting occurs, keep head lower than hips to

help prevent asporation.

Inhalation : Remove from exposure area to fresh air immediately. Give artificial respiration if

not breathing.

: Consult medical advice, and show the SDS to physician.

[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 the leeward.

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

containing earth and sand.

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

[Methods and material for containment and cleaning up]

Wipe off by dry cloth and wash with water.

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

regulations.

[Reference to other sections] No information available.

7. Handling and storage

[Precautions for safe handling]

Do not lick or swallow the ink.

Avoid contact with skin and eyes.

Ventilate the room in case of using and don't breathe the vapor.

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

[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

 Xylenes
 (TWA)100ppm (STEL)150ppm

[Exposure controls]

Protective equipment : Ventilate the room in case of using it and don't

breathe the vapor. Do mechanical exhaust as needed.

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 : Yellow State : Liquid

Odor : Aromatic odor

pH : No information available.

Boiling point : No information available.[Ethylbenzene 136.0°C]

Melting point : No information available.

Flash point : No information available.[Ethylbenzene 18.0°C]
Autoignition temperature : No information available.[Ethylbenzene 432.0°C]

Explosion limits : No information available.

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

Density : about 1.3
Solubility in water : insoluble

Evaporation rate : No information available.

Volatile : >40%

[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 : >5000 mg/kg (estimate value)

Acute toxicity(skin)

Not classified : >5000 mg/kg (estimate value)

Acute toxicity(inhalation:vapours)

Not classified : >50 mg/L (estimate value)

Skin corrosion/irritation

Xylenes : Category2 Ethylbenzene : Category3

Serious eye damage/Eye Irritation

Titanium dioxide : Category2B

Xylenes : Category2A

Ethylbenzene : Category2B

Respiratory sensitizer

No information available.

Skin sensitizer

No information available.

Germ cell mutagenicity

No information available.

Carcinogenicity

Ethylbenzene : Category2

Toxic to reproduction

Xylenes : Category1B Ethylbenzene : Category1B

Specific target organ systemic toxicity(single exposure)

Titanium dioxide : Category3

Xylenes : Category1

Ethylbenzene : Category2

Specific target organ systemic toxicity(repeated exposure)

Titanium dioxide : Category1

Xylenes : Category1

Aspiration hazard

Xylenes : Category2
Ethylbenzene : Category1

Hazard to the Aquatic Environment (Acute)

Xylenes : Category2
Ethylbenzene : Category1

Hazard to the Aquatic Environment (Chronic)

Titanium dioxide : Category4

Xylenes : Category2

12. Ecological information

[Results of PBT and vPvB assessment]

No information available.

[Other adverse effects] 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

Information of this section is about the ink.

[Safety, health and environmental regulations/legislation specific for the substance or mixture]

Follow all regulation in your country.

[Chemical safety assessment]

Ink or lead are manufactured in accordance with "ISO 8124-3:2010 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.