Section 1 - CHEMICALS AND COMPANY IDENTIFICATION

Chemical Identifier: ODF2—A
Product Code: ODF2A00001
Company Name: PENTEL CO., LTD.
Address: 7-2, KOAMICHO, NIHONBASHI, CHUO-KU, TOKYO
Company Contact: QUALITY ASSURANCE DEPARTMENT I
Phone Number: 03-5695-7210
Fax Number: 03-5645-8204
Mail Address: hinpo@pentel.co.jp
Emergency Phone Number:
Recommended Use: ink

(E)NN50,60–A, NX(N)50,60–A, NR2–A, N850.860–A, N860INK–A, NX515–A(P), NR3,4–A, NXSINK–A

Section 2 - HAZARDS IDENTIFICATION

GHS Classification

Physicochemical Hazards: Flammable liquids Category 2
Health Hazards: Acute toxicity (Inhalation: dust and mist) Category 4
Serious eye damage/eye irritation Category 1
Sensitization – respiratory Category 1
Sensitization – skin Category 1
Carcinogenicity Category 1A
Reproductive toxicity Category 1A
Specific target organ toxicity (single exposure) Category 2(systemic toxicity, central nervous system)
Specific target organ toxicity (single exposure) Category 3(narcotic effect, respiratory tract irritation)
Specific target organ toxicity (repeat exposure) Category 1(liver)
Specific target organ toxicity (repeat exposure) Category 2(central nervous system, blood)

Environmental Hazards: Hazardous to the aquatic environment (acute) Category 3
Hazardous to the aquatic environment (long–term) Category 3
Other hazards than mentioned above are Not applicable or Classification not possible.

GHS Label Elements

Symbols:

Signal Word: Danger
Hazard Statements: H332 Harmful if inhaled
Precautionary Statements

**Prevention**
- Wear protective gloves, eye protection and face protection. (P280)
- Keep container tightly closed. (P233)
- Avoid breathing mist, vapours and spray. (P261)
- Keep cool. (P235)
- Wash hand thoroughly after handling. (P264)
- Do not eat, drink or smoke when using this product. (P270)
- Use only outdoors or in a well-ventilated area. (P271)

**Response**
- IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. (P304+P340)
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305+P351+P338)
- Get medical advice and attention if you feel unwell. (P314)
- If skin irritation or rash occurs, get medical advice and attention. (P333+P313)
- If eye irritation persists: Get medical advice and attention. (P337+P313)

**Storage**
- Store in a well-ventilated place keeping container tightly closed. (P403+P233)
- Store locked up. (P405)

**Disposal**
- Dispose of contents and container in accordance with local, regional and national regulations (to be specified). (P501)

---

### Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

#### Distinction of Substance

<table>
<thead>
<tr>
<th>Chemical Name or Generic Name</th>
<th>Concentration or Its Ranges</th>
<th>Formula</th>
<th>ENCS No./ISHL No.</th>
<th>CAS RN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanol</td>
<td>49.25%</td>
<td>CH₃CH₂OH</td>
<td>(2)–202 Existing</td>
<td>64–17–5</td>
</tr>
<tr>
<td>Ingredient</td>
<td>%</td>
<td>Chemical Formula</td>
<td>CAS Number</td>
<td>Purity</td>
</tr>
<tr>
<td>------------------------------------------------</td>
<td>---</td>
<td>------------------</td>
<td>------------</td>
<td>--------</td>
</tr>
<tr>
<td>Isopropanol</td>
<td>7.72%</td>
<td>CH₃CH(OH)CH₃</td>
<td>2(2)-207</td>
<td>2-(8)-319</td>
</tr>
<tr>
<td>Acetone</td>
<td>0.63%</td>
<td>CH₃COCH₃</td>
<td>2(2)-542</td>
<td>Existing</td>
</tr>
<tr>
<td>1-Propanol</td>
<td>14%</td>
<td>CH₃CH₂CH₂OH</td>
<td>2(2)-207</td>
<td>Existing</td>
</tr>
<tr>
<td>Benzylic acid (C₁₀–₁₆)benzenesulfonic acid</td>
<td>4%</td>
<td>C₇H₅O</td>
<td>Unknown</td>
<td>Unknown</td>
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<tr>
<td>Rosin</td>
<td>7%</td>
<td>(?)-935</td>
<td>Existing</td>
<td>8050-09-7</td>
</tr>
<tr>
<td>Impurities and/or Stabilizing Additives which Contribute to the</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Section 4 – FIRST AID MEASURES
Inhalation
If breathing is difficult, move affected person to the open air. Keep him or her at rest to allow easier breathing.
Get medical advice and attention if you feel unwell.

Skin Contact
Wash with plenty of soap and water.
If skin irritation or rash occurs, get medical advice and attention.

Eye Contact
Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do.
Continue rinsing.
When the ocular stimulation lasts, Seek medical treatment and advice.

Ingestion
Rinse mouth. Do NOT induce vomiting.
Get medical advice and attention if you feel unwell.

Section 5 – FIRE FIGHTING MEASURES
Extinguishing Media
Dry chemicals, CO₂, water spray or regular foam.

Protection of Fire Fighter
In fire fighting, wear respiratory protection and chemical protective clothing.

Section 6 – ACCIDENTAL RELEASE MEASURES
Personal Precautions,
Protective Equipment and Emergency Procedures
Wear appropriate personal protective equipment (Refer to “Section 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION”) and avoid inhalation or contact with eyes and skin.

Environmental
Do not release into the environment.
Pay attention not to cause the influence on the environment by discharging into rivers.
This product is water pollutant and should be prevented from contaminating soil or from entering sewage and drainage systems and bodies of water.
Stop leak if you can do it without risk.

Methods and Equipment for Containment and Cleaning up
Small spills; cover with DRY earth, DRY sand, or other non-combustible material followed with plastic sheet to minimize spreading or contact with rain.
Allow material to solidify, and scrape up.
After removal, flush contaminated area thoroughly with water.
Prevention Measures for Secondary Accidents

Section 7 – HANDLING AND STORAGE

Handling

Technical Measures

Provide ventilation system and use necessary personal protective equipment as described in “Section 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION”.

Precautions for Safe Handling

Do not eat, drink or smoke when using this product.
Wash hand thoroughly after handling.
Avoid breathing mist, vapours and spray.
Avoid swallowing.
Avoid contact with skin.
Use exhaust ventilation.
Avoid contact with eyes.
Handle at a well-ventilated place.
Protect from high temperature and direct sunlight.

Prevents Handling of Incompatible Substances or Mixtures

Refer to “Section 10 – STABILITY AND REACTIVITY”.

Specific Hygiene Measures

Wash hand thoroughly after handling.

Storage Precautionary Statements

Conditions for Safe Storage

The storage facility should be provided with necessary lighting, lighting equipment, and ventilator to store and handle dangerous goods.
Refer to “Section 10 – STABILITY AND REACTIVITY”.
Have containers keep away from direct sunlight and heat.
Keep away from heat.
Store in a tightly closed container.
Store locked up.

Material Used in Packaging/Container

Use containers prescribed in the “Fire Service Law (Japan)" and the “UN Transport Regulations”.

Section 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls

Good general ventilation should be sufficient to control airborne levels.

Personal Protective Equipment

Respiratory Protection

Wear an adequate protective apparatus for respiratory organs.

Hand Protection

Wear protective gloves.

Eye Protection

Wear eye protection.
Protection glasses (ordinary glasses, ordinary glasses with side shields, and goggles).
### Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>liquid</td>
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<tr>
<td>Form</td>
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<tr>
<td>Colour</td>
<td>black</td>
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<tr>
<td>Odour</td>
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<tr>
<td>pH</td>
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<td>Melting Point/Freezing Point</td>
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<td>Initial Boiling Point and Boiling Ranges</td>
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<td>Evaporation Rate</td>
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<tr>
<td>Flammability (solid, gas)</td>
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</tr>
<tr>
<td>Flammability or Explosive Limits</td>
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<td>Vapour Pressure</td>
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<tr>
<td>Vapour Density</td>
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<td>Specific Gravity (Density)</td>
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<td>Auto-Ignition</td>
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<tr>
<td>Decomposition</td>
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<tr>
<td>Temperature</td>
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<td>Viscosity</td>
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### Section 10 - STABILITY AND REACTIVITY

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<td>Reactivity</td>
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<td>Possibility of Hazardous Reaction</td>
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<tr>
<td>Conditions to Avoid</td>
<td>No data available</td>
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<tr>
<td>Incompatible Substances or Mixtures</td>
<td>No data available</td>
</tr>
<tr>
<td>Hazardous Decomposition</td>
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### Section 11 - TOXICOLOGICAL INFORMATION

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Toxicity</td>
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<tr>
<td>Skin Corrosion/Irritation</td>
<td>No data available</td>
</tr>
<tr>
<td>Serious eye damage/eye irritation</td>
<td>No data available</td>
</tr>
<tr>
<td>Respiratory or Skin Sensitization</td>
<td>No data available</td>
</tr>
<tr>
<td>Germ Cell Mutagenicity</td>
<td>No data available</td>
</tr>
<tr>
<td>Carcinogenicity</td>
<td>No data available</td>
</tr>
<tr>
<td>Reproductive Toxicity</td>
<td>No data available</td>
</tr>
<tr>
<td>Specific target organ toxicity (single exposure)</td>
<td>No data available</td>
</tr>
<tr>
<td>Specific target organ toxicity (repeated exposure)</td>
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<tr>
<td>Aspiration Hazard</td>
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### Section 12 - ECOLOGICAL INFORMATION

<table>
<thead>
<tr>
<th>Property</th>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>No data available</td>
</tr>
</tbody>
</table>
Hazardous to the aquatic environment (acute) | No data available
Hazardous to the aquatic environment (long-term) | No data available
Hazardous to the ozone layer | No data available

**Section 13 - DISPOSAL CONSIDERATIONS**

Residual Waste
Disposal should be in accordance with applicable regulations and standards by the respective local governments. Commission a waste disposal company, or a local public body who are licensed by local or regional government, to dispose of the material.

Contaminated Container and Packaging
Recycle containers after cleansing, or carry out the disposal under the related laws and regulations and the standards of the local governments.

**Section 14 - TRANSPORT INFORMATION**

<table>
<thead>
<tr>
<th>Regulatory Information by Sea</th>
<th>Conform to the provisions of IMO.</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN No.</td>
<td>1263</td>
</tr>
<tr>
<td>Proper Shipping Name.</td>
<td>PAINT</td>
</tr>
<tr>
<td>Class</td>
<td>3</td>
</tr>
<tr>
<td>Packing Group</td>
<td>II</td>
</tr>
<tr>
<td>Marine Pollutant</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Transport in bulk according to MARPOL 73/78, Annex II, and the IBC code</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Regulatory Information by Air</th>
<th>Conform to the provisions of ICAO/IATA.</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN No.</td>
<td>1263</td>
</tr>
<tr>
<td>Proper Shipping Name.</td>
<td>PAINT</td>
</tr>
<tr>
<td>Class</td>
<td>3</td>
</tr>
<tr>
<td>Packing Group</td>
<td>II</td>
</tr>
<tr>
<td>Marine Pollutant</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Transport in bulk according to MARPOL 73/78, Annex II, and the IBC code</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Regulatory Information by Road or Rail</th>
<th>Conform to the provisions of the Ship Safety Law.</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN No.</td>
<td>1263</td>
</tr>
<tr>
<td>Proper Shipping Name.</td>
<td>PAINT</td>
</tr>
<tr>
<td>Class</td>
<td>3</td>
</tr>
<tr>
<td>Packing Group</td>
<td>II</td>
</tr>
<tr>
<td>Marine Pollutant</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Transport in bulk according to MARPOL 73/78, Annex II, and the IBC code</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Regulatory Information by Air</th>
<th>Conform to the provisions of the Civil Aeronautics Law.</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN No.</td>
<td>1263</td>
</tr>
<tr>
<td>Proper Shipping Name.</td>
<td>PAINT</td>
</tr>
<tr>
<td>Class</td>
<td>3</td>
</tr>
</tbody>
</table>
Section 15 - REGULATORY INFORMATION
Regulatory information with regard to this product in your country or in your region should be examined by your own responsibility.

Section 16 - OTHER INFORMATION
Information Contact
No information available
This information is furnished without warranty express or implied.
This information is believed to be accurate to the best knowledge of PENTEL Co., Ltd. but not assumes legal responsibility for use of or reliance upon this information.

Emergency Response
Guide Number
Packing Group
Ⅱ
Not applicable
Section 1 – CHEMICALS AND COMPANY IDENTIFICATION

Chemical Identifier: ODF2—B
Product Code: ODF2B00001
Company Name: PENTEL CO., LTD.
Address: 7–2, KOAMICHO, NIHONBASHI, CHUO–KU, TOKYO
Company Contact: QUALITY ASSURANCE DEPARTMENT I
Phone Number: 03–5695–7210
Fax Number: 03–5645–8204
Mail Address: hinpo@pentel.co.jp
Emergency Phone Number:
Recommended Use and Restriction on Use: ink

Section 2 – HAZARDS IDENTIFICATION

GHS Classification

Physicochemical Hazards: Flammable liquids Category 2
Health Hazards: Serious eye damage/eye irritation Category 2A
Carcinogenicity Category 1A
Specific target organ toxicity (single exposure) Category 1
(systemic toxicity, central nervous system)
Specific target organ toxicity (single exposure) Category 3
(narcotic effect, respiratory tract irritation)
Specific target organ toxicity (repeated exposure) Category 1
(liver, blood)
Specific target organ toxicity (repeated exposure) Category 2
(respiratory apparatus, central nervous system, spleen)

Environmental Hazards: Hazardous to the aquatic environment (acute) Category 3
Hazardous to the aquatic environment (long–term) Category 3
Other hazards than mentioned above are Not applicable or Classification not possible.

GHS Label Elements

Symbols

Signal Word: Danger
Hazard Statements: H350 May cause cancer
H225 Highly flammable liquid and vapour
H412 Harmful to aquatic life with long lasting effects
Precautionary Statements
Prevention

Wear protective gloves, eye protection and face protection.(P280)

Response

IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.(P304+P340)

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.(P305+P351+P338)

Get medical advice and attention if you feel unwell.(P314)

If skin irritation or rash occurs, get medical advice and attention.(P333+P313)

If eye irritation persists: Get medical advice and attention.(P337+P313)

Storage

Store in a well-ventilated place keeping container tightly closed.(P403+P233)

Disposal

Store locked up.(P405)

Dispose of contents and container in accordance with local, regional and national regulations (to be specified).(P501)

Section 3 – COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Distinction of Substance</th>
<th>Mixture</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Chemical Name or Generic Name</th>
<th>Concentration or Its Ranges</th>
<th>Formula</th>
<th>ENCS No./ISHL No. ENCS No.</th>
<th>ISHL No.</th>
<th>CAS RN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanol</td>
<td>70.59%</td>
<td>CH3CH2OH</td>
<td>(2)–202</td>
<td>Existing</td>
<td>64–17–5</td>
</tr>
<tr>
<td>Isopropanol</td>
<td>11.06%</td>
<td>CH3CH(OH)CH3</td>
<td>(2)–207</td>
<td>2–(8)–319</td>
<td>67–63–0</td>
</tr>
<tr>
<td>Acetone</td>
<td>0.91%</td>
<td>CH3COCH3</td>
<td>(2)–542</td>
<td>Existing</td>
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<tr>
<td>Benzyl alcohol</td>
<td>5%</td>
<td>C7H5O</td>
<td>(3)–1011</td>
<td>Existing</td>
<td>100–51–6</td>
</tr>
</tbody>
</table>
Impurities and/or Stabilizing Additives which Contribute to the

Section 4 - FIRST AID MEASURES

Inhalation
If breathing is difficult, move affected person to the open air. Keep him or her at rest to allow easier breathing. Get medical advice and attention if you feel unwell.

Skin Contact
Wash with plenty of soap and water. If skin irritation or rash occurs, get medical advice and attention.

Eye Contact
Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. When the ocular stimulation lasts, Seek medical treatment and advice.

Ingestion
Rinse mouth. Do NOT induce vomiting. Get medical advice and attention if you feel unwell.

Section 5 - FIRE FIGHTING MEASURES

Extinguishing Media
Dry chemicals, CO2, water spray or regular foam.

Protection of Fire Fighter
In fire fighting, wear respiratory protection and chemical protective clothing.

Section 6 - ACCIDENTAL RELEASE MEASURES

Personal Precautions,
Wear appropriate personal protective equipment (Refer to “Section 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION”) and avoid inhalation or contact with eyes and skin.

Protective Equipment and Emergency Procedures
Do not release into the environment. Pay attention not to cause the influence on the environment by discharging into rivers. This product is water pollutant and should be prevented from contaminating soil or from entering sewage and drainage systems and bodies of water. Stop leak if you can do it without risk.

Environmental

Methods and Equipment for Containment and Cleaning up
Small spills; cover with DRY earth, DRY sand, or other non-combustible material followed with plastic sheet to minimize spreading or contact with rain. Allow material to solidify, and scrape up. After removal, flush contaminated area thoroughly with water. Absorb or cover with dry earth, sand or other non-combustible material and transfer to Vacuum or sweep up material and place in a disposal container. Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container. Remove from water surface by skimming or with suitable absorbents. Do not use dispersants.

Prevention Measures for Secondary Accidents
Removes all ignition sources promptly. (Prohibition of smoking, sparks, and flames in the surrounding area).
Section 7 – HANDLING AND STORAGE

Handling

Technical Measures
Provide ventilation system and use necessary personal protective equipment as described in "Section 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION”.

Precautions for Safe Handling
Do not eat, drink or smoke when using this product.
Wash hand thoroughly after handling.
Avoid breathing mist, vapours and spray.
Avoid swallowing.
Avoid contact with skin.
Use exhaust ventilation.
Avoid contact with eyes.
Handle at a well-ventilated place.
Protect from high temperature and direct sunlight.

Prevents Handling of Incompatible Substances or Mixtures
Refer to “Section 10 – STABILITY AND REACTIVITY”.

Specific Hygiene Measures
Wash hand thoroughly after handling.

Storage Precautionary Statements

Conditions for Safe Storage
The storage facility should be provided with necessary lighting, lighting equipment, and ventilator to store and handle dangerous goods. Refer to “Section 10 – STABILITY AND REACTIVITY”.
Have containers keep away from direct sunlight and heat.
Keep away from heat.
Store in a tightly closed container.
Store locked up.

Material Used in Packaging/Container
Use containers prescribed in the “Fire Service Law (Japan)” and the “UN Transport Regulations”.

Section 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls
Good general ventilation should be sufficient to control airborne levels.

Personal Protective Equipment

Respiratory Protection
Wear an adequate protective apparatus for respiratory organs.

Hand Protection
Wear protective gloves.

Eye Protection
Wear eye protection. Protection glasses (ordinary glasses, ordinary glasses with side shields, and goggles).

Section 9 – PHYSICAL AND CHEMICAL PROPERTIES

Appearance
Physical State
liquid

Form
liquid

Colour
red

Odour
alcoholic

Odour threshold
No data available

pH
No data available

Melting Point/Freezing Point
No data available
Initial Boiling Point and Boiling Ranges
Flash Point 7.4°C (Tag Closed Cup)
Evaporation Rate No data available
Flammability (solid, gas) No data available
Flammability or Explosive Limits
  Lower Limit No data available
  Upper Limit No data available
Vapour Pressure No data available
Vapour Density No data available
Specific Gravity (Density) No data available
Partition Coefficient : n-Octanol/Water No data available
Auto-Ignition No data available
Decomposition No data available
Temperature No data available
Viscosity No data available
Kinematic viscosity No data available

Section 10 – STABILITY AND REACTIVITY
Reactivity No data available
Chemical stability No data available
Possibility of Hazardous Reaction No data available
Conditions to Avoid No data available
Incompatible Substances or Mixtures No data available
Hazardous Decomposition Products No data available

Section 11 – TOXICOLOGICAL INFORMATION
Acute Toxicity No information available
Skin Corrosion/Irritation No data available
Serious eye damage/eye irritation No data available
Respiratory or Skin Sensitization No data available
Germ Cell Mutagenicity No data available
Carcinogenicity No data available
Reproductive Toxicity No data available
Specific target organ toxicity (single exposure) No data available
Specific target organ toxicity (repeated exposure) No data available
Aspiration Hazard No data available

Section 12 – ECOLOGICAL INFORMATION
Hazardous to the aquatic environment (acute) No data available
Hazardous to the aquatic environment (long-term) No data available
Hazardous to the ozone layer No data available

Section 13 – DISPOSAL CONSIDERATIONS
Residual Waste Disposal should be in accordance with applicable regulations and standards by the respective local governments.
Contaminated Container and Packaging

Section 14 – TRANSPORT INFORMATION

International Regulations

Regulatory Information by Sea
- UN No.: 1263
- Proper Shipping Name: PAINT
- Class: 3
- Packing Group: II
- Marine Pollutant: Not applicable
- Transport in bulk according to MARPOL 73/78, Annex II, and the IBC code

Regulatory Information by Air
- UN No.: 1263
- Proper Shipping Name: PAINT
- Class: 3
- Packing Group: II

Regulatory Information by Road or Rail
- Regulatory Information by Road
- Regulatory Information by Rail

Regulations in Japan

Regulatory Information by Sea
- UN No.: 1263
- Proper Shipping Name: PAINT
- Class: 3
- Packing Group: II
- Marine Pollutant: Not applicable
- Transport in bulk according to MARPOL 73/78, Annex II, and the IBC code

Regulatory Information by Air
- UN No.: 1263
- Proper Shipping Name: PAINT
- Class: 3
- Packing Group: II

Emergency Response Guide Number

Not applicable

Section 15 – REGULATORY INFORMATION

Regulatory information with regard to this product in your country or in your region should be examined by your own responsibility.

Section 16 – OTHER INFORMATION

Information Contact
No information available

Commission a waste disposal company, or a local public body who are licensed by local or regional government, to dispose of the material.
Recycle containers after cleansing, or carry out the disposal under the related laws and regulations and the standards of the local governments.
Other Property

This information is furnished without warranty express or implied. This information is believed to be accurate to the best knowledge of PENTEL Co., Ltd. but not assumes legal responsibility for use of or reliance upon this information.
Section 1 - CHEMICALS AND COMPANY IDENTIFICATION

Chemical Identifier: ODF2-C
Product Code: ODF2C00001
Company Name: PENTEL CO., LTD.
Address: 7-2, KOAMICHO, NIHONBASHI, CHUO-KU, TOKYO
Company Contact: QUALITY ASSURANCE DEPARTMENT I
Phone Number: 03-5695-7210
Fax Number: 03-5645-8204
Mail Address: hinpo@pentel.co.jp
Emergency Phone Number: 03-5695-7210

Recommended Use and Restriction on Use:
- Ink

Section 2 - HAZARDS IDENTIFICATION

GHS Classification

Physicochemical Hazards: Flammable liquids Category 2
Health Hazards:
- Serious eye damage/eye irritation Category 2A
- Reproductive toxicity Category 1A
- Specific target organ toxicity (single exposure) Category 2 (systemic toxicity, central nervous system)
- Specific target organ toxicity (single exposure) Category 3 (narcotic effect, respiratory tract irritation)
- Specific target organ toxicity (repeated exposure) Category 1 (liver)
- Specific target organ toxicity (repeated exposure) Category 2 (central nervous system, blood)

Environmental Hazards:
- Hazardous to the aquatic environment (acute) Category 3
- Hazardous to the aquatic environment (long-term) Category 3
Other hazards than mentioned above are Not applicable or Classification not possible.

GHS Label Elements

Symbols

Signal Word: Danger
Hazard Statements:
- H319 Causes serious eye irritation
- H350 May cause cancer
- H225 Highly flammable liquid and vapour
- H412 Harmful to aquatic life with long lasting effects
Section 3 – COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Distinction of Substance or Mixture</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Chemical Name or Generic Name</th>
<th>Concentration or Its Ranges</th>
<th>Formula</th>
<th>ENCS No./ISHL No.</th>
<th>CAS RN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethanol</td>
<td>56.73%</td>
<td>CH₃CH₂OH</td>
<td>(2)–202</td>
<td>Existing</td>
</tr>
<tr>
<td>Isopropanol</td>
<td>8.89%</td>
<td>CH₃CH(OH)CH₃</td>
<td>(2)–207</td>
<td>2–(8)–319</td>
</tr>
<tr>
<td>Acetone</td>
<td>0.73%</td>
<td>CH₃COCH₃</td>
<td>(2)–542</td>
<td>Existing</td>
</tr>
<tr>
<td>Benzyl alcohol</td>
<td>5%</td>
<td>C₇H₅O</td>
<td>(3)–1011</td>
<td>Existing</td>
</tr>
<tr>
<td>1-ethoxy-2-propanol</td>
<td>10%</td>
<td></td>
<td>(7)–97</td>
<td>Existing</td>
</tr>
</tbody>
</table>

**Precautionary Statements**

**Prevention Statements**
- Wear protective gloves, eye protection and face protection. (P280)

**Response Statements**
- Keep container tightly closed. (P233)
- Use only outdoors or in a well-ventilated area. (P271)
- IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. (P304+P340)
- IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305+P351+P338)
- Get medical advice and attention if you feel unwell. (P314)
- If skin irritation or rash occurs, get medical advice and attention. (P333+P313)
- If eye irritation persists: Get medical advice and attention. (P337+P313)

**Storage Statements**
- Store in a well-ventilated place keeping container tightly closed. (P403+P233)
- Store locked up. (P405)

**Disposal Statements**
- Dispose of contents and container in accordance with local, regional and national regulations (to be specified). (P501)
Impurities and/or Stabilizing Additives which Contribute to the

Section 4 – FIRST AID MEASURES

Inhalation

If breathing is difficult, move affected person to the open air. Keep him or her at rest to allow easier breathing.
Get medical advice and attention if you feel unwell.

Skin Contact

Wash with plenty of soap and water.
If skin irritation or rash occurs, get medical advice and attention.

Eye Contact

Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do.
Continue rinsing.
When the ocular stimulation lasts, Seek medical treatment and advice.

Ingestion

Rinse mouth. Do NOT induce vomiting.
Get medical advice and attention if you feel unwell.

Section 5 – FIRE FIGHTING MEASURES

Extinguishing Media

Dry chemicals, CO2, water spray or regular foam.

Protection of Fire Fighter

In fire fighting, wear respiratory protection and chemical protective clothing.

Section 6 – ACCIDENTAL RELEASE MEASURES

Personal Precautions,

Wear appropriate personal protective equipment (Refer to “Section 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION”) and avoid inhalation or contact with eyes and skin.

Protective Equipment and Emergency Procedures

Do not release into the environment.
Pay attention not to cause the influence on the environment by discharging into rivers.
This product is water pollutant and should be prevented from contaminating soil or from entering sewage and drainage systems and bodies of water.

Environmental

Stop leak if you can do it without risk.

Methods and Equipment for Containment and Cleaning up

Small spills; cover with DRY earth, DRY sand, or other non-combustible material followed with plastic sheet to minimize spreading or contact with rain.
Allow material to solidify, and scrape up.
After removal, flush contaminated area thoroughly with water.
Absorb or cover with dry earth, sand or other non-combustible material and transfer to Vacuum or sweep up material and place in a disposal container.
Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container.
Remove from water surface by skimming or with suitable absorbents. Do not use dispersants.

Prevention Measures for Secondary Accidents

Removes all ignition sources promptly. (Prohibition of smoking, sparks, and flames in the surrounding area).
Section 7 – HANDLING AND STORAGE

Handling

Technical Measures

Provide ventilation system and use necessary personal protective equipment as described in "Section 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION".

Precautions for Safe Handling

Prevents Handling of Incompatible Substances or Mixtures

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

Avoid breathing mist, vapours and spray.

Avoid swallowing.

Avoid contact with skin.

Use exhaust ventilation.

Avoid contact with eyes.

Handle at a well-ventilated place.

Protect from high temperature and direct sunlight.

Prevents Handling of Incompatible Substances or Mixtures

Refer to "Section 10 – STABILITY AND REACTIVITY".

Specific Hygiene Measures

Wash hand thoroughly after handling.

Storage Precautionary Statements

Conditions for Safe Storage

The storage facility should be provided with necessary lighting, lighting equipment, and ventilator to store and handle dangerous goods. Refer to "Section 10 – STABILITY AND REACTIVITY".

Have containers keep away from direct sunlight and heat.

Keep away from heat.

Store in a tightly closed container.

Store locked up.

Use containers prescribed in the “Fire Service Law (Japan)” and the “UN Transport Regulations”.

Material Used in Packaging/Container

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

Wash hand thoroughly after handling.

Avoid breathing mist, vapours and spray.

Provide ventilation system and use necessary personal protective equipment as described in "Section 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION".

Avoid contact with eyes.

Handle at a well-ventilated place.

Protect from high temperature and direct sunlight.

Section 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls

Good general ventilation should be sufficient to control airborne levels.

Personal Protective Equipment

Respiratory Protection

Wear an adequate protective apparatus for respiratory organs.

Hand Protection

Wear protective gloves.

Eye Protection

Wear eye protection.

Protection glasses (ordinary glasses, ordinary glasses with side shields, and goggles).

Section 9 – PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical State

liquid

Form

liquid

Colour

blue

Odour

alcoholic

Odour threshold

No data available

pH

No data available

Melting Point/Freezing Point

No data available
Initial Boiling Point and Boiling Ranges
Flash Point
Evaporation Rate
Flammability (solid, gas)
Flammability or Explosive Limits
Lower Limit
Upper Limit
Vapour Pressure
Vapour Density
Specific Gravity (Density)
Partition Coefficient : n-
Octanol/Water
Auto-Ignition
Decomposition
Temperature
Viscosity
Kinematic viscosity
No data available

Section 10 - STABILITY AND REACTIVITY
Reactivity
Chemical stability
Possibility of Hazardous Reaction
Conditions to Avoid
Incompatible Substances or Mixtures
Hazardous Decomposition Products
No data available

Section 11 - TOXICOLOGICAL INFORMATION
Acute Toxicity
Skin Corrosion/Irritation
Serious eye damage/eye irritation
Respiratory or Skin Sensitization
Germ Cell Mutagenicity
Carcinogenicity
Reproductive Toxicity
Specific target organ toxicity (single exposure)
Specific target organ toxicity (repeated exposure)
Aspiration Hazard
No information available
No data available
No data available

Section 12 - ECOLOGICAL INFORMATION
Hazardous to the aquatic environment (acute)
Hazardous to the aquatic environment (long–term)
Hazardous to the ozone layer
No data available
No data available
No data available

Section 13 - DISPOSAL CONSIDERATIONS
Residual Waste
Disposal should be in accordance with applicable regulations and standards by the respective local governments.
Contaminated Container and Packaging

Commission a waste disposal company, or a local public body who are licensed by local or regional government, to dispose of the material. Recycle containers after cleansing, or carry out the disposal under the related laws and regulations and the standards of the local governments.

### Section 14 – TRANSPORT INFORMATION

#### International Regulations

<table>
<thead>
<tr>
<th>Regulatory Information by Sea</th>
<th>Conform to the provisions of IMO.</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN No.</td>
<td>1263</td>
</tr>
<tr>
<td>Proper Shipping Class</td>
<td>PAINT</td>
</tr>
<tr>
<td>Marine Pollutant</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Transport in bulk according to MARPOL 73/78, Annex II, and the IBC code</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

#### Regulatory Information by Air

| UN No.                       | 1263                             |
| Proper Shipping Class        | PAINT                            |
| Marine Pollutant             | Not applicable                   |
| Transport in bulk according to MARPOL 73/78, Annex II, and the IBC code | Not applicable                   |

#### Regulations in Japan

<table>
<thead>
<tr>
<th>Regulatory Information by Road or Rail</th>
<th>Conform to the provisions of the Ship Safety Law.</th>
</tr>
</thead>
<tbody>
<tr>
<td>UN No.</td>
<td>1263</td>
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<tr>
<td>Proper Shipping Class</td>
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#### Emergency Response Guide Number

<table>
<thead>
<tr>
<th>Conform to the provisions of the Civil Aeronautics Law.</th>
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<tr>
<td>Class</td>
</tr>
<tr>
<td>Packing Group</td>
</tr>
</tbody>
</table>

### Section 15 – REGULATORY INFORMATION

Regulatory information with regard to this product in your country or in your region should be examined by your own responsibility.

### Section 16 – OTHER INFORMATION

<table>
<thead>
<tr>
<th>Information Contact</th>
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