Safety Data Sheet (SDS)

Preparation Date 2011/08/11
Revision Date 2017/01/13

Section 1 - CHEMICALS AND COMPANY IDENTIFICATION

Chemical Identifier WDF1-A
Product Code WDF1A00001
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 03-5695-7210
Recommended Use ink

Section 2 - HAZARDS IDENTIFICATION

GHS Classification

Health Hazards Serious eye damage/eye irritation Category 2B
Specific target organ toxicity (single exposure) Category 1 (respiratory apparatus, heart, kidney, central nervous system)
Specific target organ toxicity (repeated exposure) Category 1 (respiratory apparatus, heart, central nervous system)
Other hazards than mentioned above are Not applicable or Classification not possible.

GHS Label Elements

Symbols

Signal Word Danger
Hazard Statements
H320 Causes eye irritation
H370 Causes damage to respiratory apparatus, heart, kidney, central nervous system
H372 Causes damage to respiratory apparatus, heart, central nervous system through prolonged or repeated exposure

Precautionary Statements
Prevention Do not breathe mist, vapours and spray. (P260)
Wash hand thoroughly after handling. (P260)
Wash eye thoroughly after handling. (P264)
Do not eat, drink or smoke when using this product. (P270)
Responser IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305+P351+P338)
Section 3 – COMPOSITION / INFORMATION ON INGREDIENTS

<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>ENCS No.</th>
<th>ISHL No.</th>
<th>CAS RN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene glycol</td>
<td>12.5%</td>
<td>HOCH2CH2OH</td>
<td>(2)–230</td>
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<tr>
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<td>HOCH2CH(OH)CH3</td>
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<td>2–(8)–321</td>
<td>2–(8)–323</td>
<td>57–55–6</td>
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<tr>
<td>2-phenoxyethanol</td>
<td>0.5%</td>
<td></td>
<td>(3)–558</td>
<td>Existing</td>
<td>(7)–78</td>
<td>(9)–1277</td>
</tr>
</tbody>
</table>

Impurities and/or Stabilizing Additives which Contribute to the Mixture

No information available

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.

Section 6 – ACCIDENTAL RELEASE MEASURES

Environmental Precautions

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.

Methods and Equipment for Containment and Cleaning up

After removal, flush contaminated area thoroughly with water.

Vacuum or sweep up material and place in a disposal container.
Prevention Measures for Secondary Accidents

Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container. Prevent flowing into drain, sewage, basement, and closed area. Remove thoroughly since the smooth and slippery surface will be formed on the floor.

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

Avoid contact with eyes.
Wash hand thoroughly after handling.
Avoid swallowing.
Protect from high temperature and direct sunlight.

Prevents Handling of Imcompatible Substances or Mixtures

Refer to “Section 10 – STABILITY AND REACTIVITY”.

Specific Hygiene Measures

Wash hand thoroughly after handling.

Storage Precautionary Statements

Technical Measures

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 locked up.

Material Used in Packaging/Container

Packaging materials and containers are not legislated, but use sturdy and closed–type containers.

Section 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls

Good general ventilation should be sufficient to control airborne levels.

Personal Protective Equipment

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: black

Odour

Odour threshold: No data available

pH: No data available

Melting Point/Freezing Point: No data available

Initial Boiling Point and Boiling Ranges: No data available

Flash Point: No data available

Evaporation Rate: No data available

Flammability (solid, gas): No data available
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<td>Flammability or Explosive Limits</td>
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<td>No data available</td>
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<td>Vapour Pressure</td>
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<tr>
<td>Vapour Density</td>
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<tr>
<td>Specific Gravity (Density)</td>
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<tr>
<td>Partition Coefficient : n-Octanol/Water</td>
<td>No data available</td>
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<tr>
<td>Auto-Ignition</td>
<td>No data available</td>
<td>No data available</td>
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<td>Decomposition</td>
<td>No data available</td>
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<tr>
<td>Temperature</td>
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<td>Viscosity</td>
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<td>Kinematic viscosity</td>
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**Section 10 – STABILITY AND REACTIVITY**

<table>
<thead>
<tr>
<th>Property</th>
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<tbody>
<tr>
<td>Reactivity</td>
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<td>Chemical stability</td>
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<td>Possibility of Hazardous Reaction</td>
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<td>Conditions to Avoid</td>
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<td>Incompatible Substances or Mixtures</td>
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<td>Hazardous Decomposition</td>
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**Section 11 – TOXICOLOGICAL INFORMATION**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
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</thead>
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<td>Acute Toxicity</td>
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<tr>
<td>Skin Corrosion/Irritation</td>
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<tr>
<td>Serious eye damage/eye irritation</td>
<td>No data available</td>
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<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>
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<tr>
<td>Specific target organ toxicity</td>
<td>No data available</td>
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<tr>
<td>Specific target organ toxicity</td>
<td>No data available</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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</thead>
<tbody>
<tr>
<td>Hazardous to the aquatic environment (acute)</td>
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<tr>
<td>Hazardous to the aquatic environment (long-term)</td>
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<tr>
<td>Hazardous to the ozone layer</td>
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**Section 13 – DISPOSAL CONSIDERATIONS**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
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</thead>
<tbody>
<tr>
<td>Residual Waste</td>
<td>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.</td>
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</table>
### 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>International Regulations</th>
<th>Regulatory Information by Sea</th>
<th>Regulatory Information by Air</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regulatory Information by Sea</td>
<td>Marine Pollutant Transport in bulk according to MARPOL 73/78, Annex II, and the IBC code</td>
<td>Regulatory Information by Air</td>
</tr>
<tr>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
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<thead>
<tr>
<th>Regulations in Japan</th>
<th>Regulatory Information by Road or Rail</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regulatory Information by Sea</td>
<td>Marine Pollutant Transport in bulk according to MARPOL 73/78, Annex II, and the IBC code</td>
</tr>
<tr>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

| 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

<table>
<thead>
<tr>
<th>Information Contact</th>
<th>No information available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other Property</td>
<td>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.</td>
</tr>
</tbody>
</table>
Section 1 - CHEMICALS AND COMPANY IDENTIFICATION

Chemical Identifier  WDF1-B
Product Code  WDF1B00001
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  03-5695-7210

Recommended Use and Restriction on Use  ink

Section 2 - HAZARDS IDENTIFICATION

GHS Classification

Health Hazards
- Serious eye damage/eye irritation Category 2B
- Specific target organ toxicity (single exposure) Category 1(respiratory apparatus,heart,kidney,central nervous system)
- Specific target organ toxicity (repeated exposure) Category 1(respiratory apparatus,heart,central nervous system)
- Other hazards than mentioned above are Not applicable or Classification not possible.

GHS Label Elements

Symbols

Signal Word  Danger
Hazard Statements
- H320 Causes eye irritation
- H370 Causes damage to respiratory apparatus,heart,kidney,central nervous system
- H372 Causes damage to respiratory apparatus,heart,central nervous system through prolonged or repeated exposure

Precautionary Statements

Prevention
Do not breathe mist, vapours and spray.(P260)

Precautionary Statements
Wash hand thoroughly after handling.(P260)
Wash eye thoroughly after handling.(P264)
Do not eat, drink or smoke when using this product.(P270)

Response
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.(P305+P351+P338)
Section 3 – COMPOSITION / INFORMATION ON INGREDIENTS

<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>
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<tbody>
<tr>
<td>Ethylene glycol</td>
<td>25%</td>
<td>HOCH2CH_2OH</td>
<td>(2)-230, Existing</td>
<td>107–21–1</td>
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<tr>
<td>2-phenoxyethanol</td>
<td>0.5%</td>
<td>(3)-558, (7)-78, (9)-1277, Existing</td>
<td>122–99–6</td>
<td></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.

Section 6 – ACCIDENTAL RELEASE MEASURES

Environmental Precautions
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. After removal, flush contaminated area thoroughly with water.

Methods and Equipment for Containment and Cleaning up
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.
Prevention Measures for Secondary Accidents

Prevent flowing into drain, sewage, basement, and closed area. Remove thoroughly since the smooth and slippery surface will be formed on the floor.

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

Wash hand thoroughly after handling.

Prevents Handling of Incompatible Substances or Mixtures

Protect from high temperature and direct sunlight. Refer to “Section 10 – STABILITY AND REACTIVITY”.

Specific Hygiene Measures

Wash hand thoroughly after handling.

Storage Precautionary Statements

Technical Measures

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 locked up.

Material Used in Packaging/Containers

Packaging materials and containers are not legislated, but use sturdy and closed-type containers.

Section 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls

Good general ventilation should be sufficient to control airborne levels.

Personal Protective Equipment

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: odorless

Odour threshold: No data available

pH: No data available

Melting Point/Freezing Point: No data available

Initial Boiling Point and Boiling Ranges: No data available

Flash Point: No data available

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
Imcompatible 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. 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
International Regulations  Regulatory Information by Sea  Not applicable
<table>
<thead>
<tr>
<th>Marine Pollutant Transport in bulk according to MARPOL 73/78, Annex II, and the IBC code</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regulatory Information by Air</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Regulatory Information by Road or Rail</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Regulatory Information by Sea</td>
<td>Not applicable</td>
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<tr>
<td>Marine Pollutant Transport in bulk according to MARPOL 73/78, Annex II, and the IBC code</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Regulatory Information by Air</td>
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</tbody>
</table>

**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 
| Other Property      |
|---------------------|-------------------|
| 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. |
Section 1 - CHEMICALS AND COMPANY IDENTIFICATION

Chemical Identifier: WDF9-C
Product Code: WDF9C00001
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

Health Hazards
- Serious eye damage/eye irritation Category 2B
- Reproductive toxicity Category 2
- Specific target organ toxicity (single exposure) Category 1 (respiratory apparatus, heart, kidney, central nervous system)
- Specific target organ toxicity (repeated exposure) Category 1 (liver, respiratory apparatus, heart, central nervous system, kidney)
- Other hazards than mentioned above are Not applicable or Classification not possible.

GHS Label Elements

Symbols

Signal Word: Danger
Hazard Statements:
- H320 Causes eye irritation
- H361 Suspected of damaging fertility or the unborn child
- H370 Causes damage to respiratory apparatus, heart, kidney, central nervous system
- H372 Causes damage to liver, respiratory apparatus, heart, kidney, central nervous system through prolonged or repeated exposure

Precautionary Statements

Prevention:
- Wear protective gloves. (P280)

Precautionary Statements:
- Do not breathe mist, vapours and spray. (P260)
- Wash hand thoroughly after handling. (P264)
- Wash eye thoroughly after handling. (P264)
- Do not eat, drink or smoke when using this product. (P270)
Response

Precautionary Statements

Storage

Precautionary Statements

Disposal

Precautionary Statements

Section 3 – COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Distinction of Substance or Mixture</th>
<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>
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<tbody>
<tr>
<td>Mixture</td>
<td>Ethylene glycol</td>
<td>15%</td>
<td>HOCH₂CH₂OH</td>
<td>(2)–230</td>
<td>Existing</td>
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<td></td>
<td>Diethylene glycol</td>
<td>15%</td>
<td>HOCH₂CH₂OCH₂C₂H₂OH</td>
<td>(2)–415</td>
<td>Existing</td>
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<td></td>
<td>2-Phenoxyethanol</td>
<td>0.5%</td>
<td>(3)–558 (7)–78 (9)–1277</td>
<td>Existing</td>
<td>122–99–6</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.

Section 6 – ACCIDENTAL RELEASE MEASURES

Environmental Precautions

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.
Methods and Equipment for Containment and Cleaning up

After removal, flush contaminated area thoroughly with water.

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.

Prevention Measures for Secondary Accidents

Prevent flowing into drain, sewage, basement, and closed area.
Remove thoroughly since the smooth and slippery surface will be formed on the floor.

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

Wash hand thoroughly after handling.

Protect from high temperature and direct sunlight.

Prevents Handling of Imcompatible Substances or Mixtures

Refer to “Section 10 – STABILITY AND REACTIVITY”.

Specific Hygiene Measures

Wash hand thoroughly after handling.

Storage Precautionary Statements

Technical Measures

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 locked up.

Material Used in Packaging/Containers

Packaging materials and containers are not legislated, but use sturdy and closed-type containers.

Section 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls

Good general ventilation should be sufficient to control airborne levels.

Personal Protective Equipment

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

odorless

Odour threshold

No data available

pH

No data available

Melting Point/Freezing Point

No data available

Initial Boiling Point and Boiling Ranges

No data available

Flash Point

No data available
<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
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<tr>
<td>Evaporation Rate</td>
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<td>Flammability (solid, gas)</td>
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<tr>
<td>Flammability or Explosive Limits</td>
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<td>Vapour Pressure</td>
<td>No data available</td>
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<tr>
<td>Vapour Density</td>
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<tr>
<td>Specific Gravity (Density)</td>
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<td>Partition Coefficient : n-Octanol/Water</td>
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<tr>
<td>Auto-Ignition</td>
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</tr>
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<td>Decomposition</td>
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</tr>
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<td>Temperature</td>
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<td>Viscosity</td>
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<td>Kinematic viscosity</td>
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<tr>
<td>Section 10 – STABILITY AND REACTIVITY</td>
<td></td>
</tr>
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<td>Reactivity</td>
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<td>Chemical stability</td>
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<td>Possibility of Hazardous Reaction</td>
<td>No data available</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>
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<tr>
<td>Hazardous Decomposition</td>
<td>No data available</td>
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<tr>
<td>Section 11 – TOXICOLOGICAL INFORMATION</td>
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<tr>
<td>Acute Toxicity</td>
<td>No information available</td>
</tr>
<tr>
<td>Skin Corrosion/Irritation</td>
<td>No data available</td>
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<tr>
<td>Serious eye damage/eye irritation</td>
<td>No data available</td>
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<tr>
<td>Respiratory or Skin Sensitization</td>
<td>No data available</td>
</tr>
<tr>
<td>Germ Cell Mutagenicity</td>
<td>No data available</td>
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<tr>
<td>Carcinogenicity</td>
<td>No data available</td>
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<tr>
<td>Reproductive Toxicity</td>
<td>No data available</td>
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<tr>
<td>Specific target organ toxicity (single exposure)</td>
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</tr>
<tr>
<td>Specific target organ toxicity (repeated exposure)</td>
<td>No data available</td>
</tr>
<tr>
<td>Aspiration Hazard</td>
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</tr>
<tr>
<td>Section 12 – ECOLOGICAL INFORMATION</td>
<td></td>
</tr>
<tr>
<td>Hazardous to the aquatic environment (acute)</td>
<td>No data available</td>
</tr>
<tr>
<td>Hazardous to the aquatic environment (long-term)</td>
<td>No data available</td>
</tr>
<tr>
<td>Hazardous to the ozone layer</td>
<td>No data available</td>
</tr>
<tr>
<td>Section 13 – DISPOSAL CONSIDERATIONS</td>
<td></td>
</tr>
<tr>
<td>Residual Waste</td>
<td>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.</td>
</tr>
</tbody>
</table>
### 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>International Regulations</th>
<th>Regulatory Information by Sea</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Marine Pollutant Transport in bulk according to MARPOL 73/78, Annex II, and the IBC code</td>
<td>Not applicable</td>
</tr>
<tr>
<td></td>
<td>Regulatory Information by Air</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Regulations in Japan</th>
<th>Regulatory Information by Road or Rail</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Regulatory Information by Sea</td>
<td>Not applicable</td>
</tr>
<tr>
<td></td>
<td>Marine Pollutant Transport in bulk according to MARPOL 73/78, Annex II, and the IBC code</td>
<td>Not applicable</td>
</tr>
<tr>
<td></td>
<td>Regulatory Information by Air</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

| 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

<table>
<thead>
<tr>
<th>Information Contact</th>
<th>No information available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other Property</td>
<td>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.</td>
</tr>
</tbody>
</table>
Safety Data Sheet (SDS)

Section 1 - CHEMICALS AND COMPANY IDENTIFICATION

Chemical Identifier  WDF1-D
Product Code  WDF1D00001
Company Name  PENTEL CO., LTD.
Address  7-2,KOAMICHO,NIHONBASHI,CHUO-KU,TOKYO
Company Contact  QUALITY ASSURANCE DEPARTMENT 1
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

Health Hazards  Serious eye damage/eye irritation Category 2B
Specific target organ toxicity (single exposure) Category 1(respiratory apparatus,heart,kidney,central nervous system)
Specific target organ toxicity (repeated exposure) Category 1(respiratory apparatus,heart,central nervous system)
Other hazards than mentioned above are Not applicable or Classification not possible.

GHS Label Elements

Symbols

Signal Word  Danger
Hazard Statements  H320 Causes eye irritation
H370 Causes damage to respiratory apparatus,heart,kidney,central nervous system
H372 Causes damage to respiratory apparatus,heart,central nervous system through prolonged or repeated exposure
Precautionary Statements
Prevention
Precautionary Statements
Do not breathe mist, vapours and spray.(P260)
Wash hand thoroughly after handling.(P260)
Wash eye thoroughly after handling.(P264)
Do not eat, drink or smoke when using this product.(P270)
Response
Precautionary Statements
IF IN EYES:  Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.(P305+P351+P338)
Storage
Precautionary Statements
Dispose
Precautionary Statements
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>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>Ethylene glycol</td>
<td>28%</td>
<td>HOCH2CH2OH</td>
<td>(2)–230</td>
<td>Existing 107–21–1</td>
</tr>
<tr>
<td>2-phenoxyethanol</td>
<td>0.5%</td>
<td>(3)–558 (7)–78 (9)–1277</td>
<td>Existing</td>
<td>122–99–6</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.

Section 6 – ACCIDENTAL RELEASE MEASURES

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

Methods and Equipment for Containment and Cleaning up
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.
Prevention Measures for Secondary Accidents

Prevent flowing into drain, sewage, basement, and closed area.
Remove thoroughly since the smooth and slippery surface will be formed on the floor.

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
Prevent flowing into drain, sewage, basement, and closed area.
Remove thoroughly since the smooth and slippery surface will be formed on the floor.

Protect from high temperature and direct sunlight.

Prevents Handling of Imcompatible Substances or Mixtures
Wash hand thoroughly after handling.

Refer to “Section 10 – STABILITY AND REACTIVITY”.

Specific Hygiene Measures
Wash hand thoroughly after handling.

Storage Precautionary Statements

Technical Measures
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 locked up.

Material Used in Packaging/Containers
Packaging materials and containers are not legislated, but use sturdy and closed-type containers.

Section 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls

Good general ventilation should be sufficient to control airborne levels.

Personal Protective Equipment

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
green

Odour
odorless

Odour threshold
No data available

pH
No data available

Melting Point/Freezing Point
No data available

Initial Boiling Point and Boiling Ranges
No data available

Flash Point
No data available

Evaporation Rate
No data available

Flammability (solid, gas)
No data available

Flammability or Explosive Limits
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 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
Imcompatible 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.
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 Regulatory Information by Sea  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
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.
**Safety Data Sheet (SDS)**

**Preparation Date** 2011/11/18  
**Revision Date** 2017/01/13

### Section 1 - CHEMICALS AND COMPANY IDENTIFICATION

<table>
<thead>
<tr>
<th>Chemical Identifier</th>
<th>WDF1–E</th>
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<tbody>
<tr>
<td>Product Code</td>
<td>WDF1E00001</td>
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<tr>
<td>Company Name</td>
<td>PENTEL CO., LTD.</td>
</tr>
<tr>
<td>Address</td>
<td>7–2, KOAMICHO, NIHONBASHI, CHUO–KU, TOKYO</td>
</tr>
<tr>
<td>Company Contact</td>
<td>QUALITY ASSURANCE DEPARTMENT I</td>
</tr>
<tr>
<td>Phone Number</td>
<td>03–5695–7210</td>
</tr>
<tr>
<td>Fax Number</td>
<td>03–5645–8204</td>
</tr>
<tr>
<td>Mail Address</td>
<td><a href="mailto:hinpo@pentel.co.jp">hinpo@pentel.co.jp</a></td>
</tr>
<tr>
<td>Emergency Phone</td>
<td>03–5695–7210</td>
</tr>
</tbody>
</table>

**Recommended Use and Restriction on Use**  
ink

**Recommended Use and Restriction on Use**  
S520–E.SES15C–E

### Section 2 - HAZARDS IDENTIFICATION

**GHS Classification**

**Health Hazards**
- Serious eye damage/eye irritation Category 2B
- Specific target organ toxicity (single exposure) Category 1 (respiratory apparatus, heart, kidney, central nervous system)
- Specific target organ toxicity (repeated exposure) Category 1 (respiratory apparatus, heart, central nervous system)
- Other hazards than mentioned above are Not applicable or Classification not possible.

**GHS Label Elements**

<table>
<thead>
<tr>
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<td>![Danger symbol]</td>
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<table>
<thead>
<tr>
<th>Signal Word</th>
<th>Danger</th>
</tr>
</thead>
</table>

**Hazard Statements**
- H320 Causes eye irritation
- H370 Causes damage to respiratory apparatus, heart, kidney, central nervous system
- H372 Causes damage to respiratory apparatus, heart, central nervous system through prolonged or repeated exposure

**Precautionary Statements**

<table>
<thead>
<tr>
<th>Prevention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do not breathe mist, vapours and spray. (P260)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Precautionary Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wash hand thoroughly after handling. (P260)</td>
</tr>
<tr>
<td>Wash eye thoroughly after handling. (P260)</td>
</tr>
<tr>
<td>Do not eat, drink or smoke when using this product. (P270)</td>
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</table>

**Response**

<table>
<thead>
<tr>
<th>Precautionary Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305+P351+P338)</td>
</tr>
</tbody>
</table>
Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Distinction of Substance</th>
<th>Mixture</th>
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<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>
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<tr>
<td>Ethylene glycol</td>
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<td>2-phenoxycethanol</td>
<td>0.5%</td>
<td>(3)–558 (7)–78 (9)–1277</td>
<td>Existing</td>
<td>122–99–6</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.

Section 6 - ACCIDENTAL RELEASE MEASURES

Environmental Precautions
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.

Methods and Equipment for Containment and Cleaning up
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.
After removal, flush contaminated area thoroughly with water.

Storage
Precautionary Statements
Disposal
Precautionary Statements

If eye irritation persists: Get medical advice and attention.(P337+P313)
Store locked up.(P405)
Dispose of contents and container in accordance with local, regional and national regulations (to be specified).(P501)
Prevention Measures for Secondary Accidents

Section 7 – HANDLING AND STORAGE

Handling

Technical Measures

Precautions for Safe Handling

Prevents Handling of Imcompatible Substances or Mixtures

Specific Hygiene Measures

Storage Precautionary Statements

Technical Measures

Material Used in Packaging/Containers

Section 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls

Personal Protective Equipment

Eye Protection

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

Section 9 – PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical State

Form

Colour

Odour

Odour threshold

pH

Melting Point/Freezing Point

Initial Boiling Point and Boiling Ranges

Flash Point

Evaporation Rate

Flammability (solid, gas)

Flammability or Explosive Limits

Lower Limit

Upper Limit

WDF1-E, PENTEL CO., LTD., 3, 2017/01/13, 3/5
Vapour Pressure No data available
Vapour Density No data available
Specific Gravity (Density) No data available
Partition Coefficient \( n^- \) No data available
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
Imcompatible 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.
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
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.

Other Property
Not applicable
Safety Data Sheet (SDS)

Preparation Date 2011/11/18
Revision Date 2017/01/13

Section 1 – CHEMICALS AND COMPANY IDENTIFICATION

Chemical Identifier WDF1-F
Product Code WDF1F00001
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 ink
Use S520–F.SES15C–F

Section 2 – HAZARDS IDENTIFICATION

GHS Classification

Health Hazards
Serious eye damage/eye irritation Category 2B
Specific target organ toxicity (single exposure) Category 1(respiratory apparatus,heart,kidney,central nervous system)
Specific target organ toxicity (repeated exposure) Category 1(respiratory apparatus,heart,central nervous system)
Other hazards than mentioned above are Not applicable or Classification not possible.

GHS Label Elements

Symbols

Signal Word Danger
Hazard Statements
H320 Causes eye irritation
H370 Causes damage to respiratory apparatus,heart,kidney,central nervous system
H372 Causes damage to respiratory apparatus,heart,central nervous system through prolonged or repeated exposure

Precautionary Statements
Prevention Do not breathe mist, vapours and spray.(P260)
Wash hand thoroughly after handling.(P260)
Wash eye thoroughly after handling.(P264)
Do not eat, drink or smoke when using this product.(P270)

Response IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.(P305+P351+P338)
Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Distinction of Substance</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>Ethylene glycol</td>
<td>27.5%</td>
<td>HOCH2CH2OH</td>
<td>(2)-230</td>
<td>Existing</td>
</tr>
<tr>
<td>2-phenoxyethanol</td>
<td>0.5%</td>
<td>(3)-558 (7)-78 (9)-1277</td>
<td>Existing</td>
<td>122–99–6</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.

Section 6 - ACCIDENTAL RELEASE MEASURES

Environmental Precautions: 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.
After removal, flush contaminated area thoroughly with water.

Methods and Equipment for Containment and Cleaning up: 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.
Prevention Measures for Secondary Accidents

Prevent flowing into drain, sewage, basement, and closed area. Remove thoroughly since the smooth and slippery surface will be formed on the floor.

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

Wash hand thoroughly after handling.

Prevents Handling of Incompatible Substances or Mixtures

Protect from high temperature and direct sunlight. Refer to “Section 10 – STABILITY AND REACTIVITY”.

Specific Hygiene Measures

Wash hand thoroughly after handling.

Storage Precautionary Statements

Technical Measures

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 locked up.

Material Used in Packaging/Containers

Packaging materials and containers are not legislated, but use sturdy and closed-type containers.

Section 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls

Good general ventilation should be sufficient to control airborne levels.

Personal Protective Equipment

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: orange

Odour

odorless

Odour threshold: No data available

pH: No data available

Melting Point/Freezing Point: No data available

Initial Boiling Point and Boiling Ranges: No data available

Flash Point: No data available

Evaporation Rate: No data available

Flammability (solid, gas): No data available

Flammability or Explosive Limits: No data available

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
Imcompatible 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.
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 Regulatory Information by Sea 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
- **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.
Safety Data Sheet (SDS)

Preparation Date  2011/11/18
Revision Date  2017/01/13

Section 1 - CHEMICALS AND COMPANY IDENTIFICATION

Chemical Identifier  WDF9–G
Product Code  WDF9G00001
Company Name  PENTEL CO., LTD.
Address  7–2,KOAMICHO,NIHONBASHI,CHUO–KU,TOKYO
Company Contact  QUALITY ASSURANCE DEPARTMENT 1
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

Health Hazards  Serious eye damage/eye irritation Category 2B
Reproductive toxicity Category 2
Specific target organ toxicity (single exposure) Category 2(respiratory apparatus,heart,kidney,central nervous system)
Specific target organ toxicity (repeated exposure) Category 2(liver,respiratory apparatus,heart,central nervous system,kidney)
Other hazards than mentioned above are Not applicable or Classification not possible.

GHS Label Elements

Symbols

Signal Word  Warning
Hazard Statements  H320 Causes eye irritation
H361 Suspected of damaging fertility or the unborn child
H371 May cause damage to respiratory apparatus,heart,kidney,central nervous system
H373 May cause damage to liver,respiratory apparatus,heart,kidney,central nervous system through prolonged or repeated exposure

Precautionary Statements
Prevention  Wear protective gloves.(P280)

Precautionary Statements  Do not breathe mist, vapours and spray.(P260)
Wash hand thoroughly after handling.(P264)
Wash eye thoroughly after handling.(P264)
Do not eat, drink or smoke when using this product.(P270)
Response
Precautionary Statements

Storage
Precautionary Statements
Disposal
Precautionary Statements

Section 3 – COMPOSITION / INFORMATION ON INGREDIENTS

Distinction of Substance or Mixture

<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>Ethylene glycol</td>
<td>9%</td>
<td>HOCH2CH_2OH</td>
<td>(2)−230</td>
<td>Existing</td>
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<td>(7)−78</td>
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Impurities and/or Stabilizing Additives which Contribute to the Mixture

No information available

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.

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.

Section 6 – ACCIDENTAL RELEASE MEASURES

Personal Precautions,
Protective Equipment and Emergency Procedures
Stay upwind.

Keep out of low areas.
Environmental Precautions
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.

Methods and Equipment for Containment and Cleaning up
After removal, flush contaminated area thoroughly with water.
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.

Prevention Measures for Secondary Accidents
Prevent flowing into drain, sewage, basement, and closed area.
Remove thoroughly since the smooth and slippery surface will be formed on the floor.

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
Avoid contact with eyes.
Wash hand thoroughly after handling.
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
Technical Measures
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 locked up.

Material Used in Packaging/Containers
Packaging materials and containers are not legislated, but use sturdy and closed-type containers.

Section 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION
Engineering Controls
Good general ventilation should be sufficient to control airborne levels.

Personal Protective Equipment
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
yellow green/Light Green
Odour
odorless
Odour threshold
No data available
pH
Melting Point/Freezing Point
Initial Boiling Point and Boiling Ranges
Flash Point
Evaporation Rate
Flammability (solid, gas)
Flammability or Explosive Limits
Vapour Pressure
Vapour Density
Specific Gravity (Density)
Partition Coefficient : n-Octanol/Water
Auto-Ignition
Decomposition Temperature
Viscosity
Kinicmic viscosity

Section 10 – STABILITY AND REACTIVITY
Reactivity
Chemical stability
Possibility of Hazardous Reaction
Conditions to Avoid
Imcompatible Substances or Mixtures
Hazardous Decomposition Products

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

Section 12 – ECOLOGICAL INFORMATION
Hazardous to the aquatic environment (acute)
Hazardous to the aquatic environment (long-term)
Hazardous to the ozone layer

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

International Regulations

| Regulatory Information by Sea | Not applicable |
| Marine Pollutant Transport in bulk according to MARPOL 73/78, Annex II, and the IBC code | Not applicable |

Regulations in Japan

| Regulatory Information by Road or Rail | Not applicable |
| Regulatory Information by Sea Marine Pollutant Transport in bulk according to MARPOL 73/78, Annex II, and the IBC code | Not applicable |

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
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.

Other Property

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.
Safety Data Sheet (SDS)

Preparation Date  2011/11/18
Revision Date  2017/01/13

Section 1 - CHEMICALS AND COMPANY IDENTIFICATION

Chemical Identifier  WDF1-N
Product Code  WDF1N00001
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  ink

Section 2 - HAZARDS IDENTIFICATION

GHS Classification

Health Hazards  Serious eye damage/eye irritation Category 2B
Specific target organ toxicity (single exposure) Category 1(respiratory apparatus,heart,kidney,central nervous system)
Specific target organ toxicity (repeated exposure) Category 1(respiratory apparatus,heart,central nervous system)
Other hazards than mentioned above are Not applicable or Classification not possible.

GHS Label Elements

Symbols

Signal Word  Danger
Hazard Statements  H320 Causes eye irritation
H370 Causes damage to respiratory apparatus,heart,kidney,central nervous system
H372 Causes damage to respiratory apparatus,heart,central nervous system through prolonged or repeated exposure

Precautionary Statements

Prevention
Do not breathe mist, vapours and spray. (P260)
Wash hand thoroughly after handling. (P260)
Wash eye thoroughly after handling. (P264)
Do not eat, drink or smoke when using this product. (P270)

Response
IF IN EYES:  Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. (P305+P351+P338)
Section 3 – COMPOSITION / INFORMATION ON INGREDIENTS

<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>Ethylene glycol</td>
<td>23.7%</td>
<td>HOCH2CH2OH</td>
<td>(2)–230</td>
<td>Existing 107–21–1</td>
</tr>
</tbody>
</table>

Impurities and/or Stabilizing Additives which Contribute to the
No information available

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.

Section 6 – ACCIDENTAL RELEASE MEASURES

Environmental Precautions
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.
After removal, flush contaminated area thoroughly with water.

Methods and Equipment for Containment and Cleaning up
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.

Prevention Measures for Secondary Accidents
Prevent flowing into drain, sewage, basement, and closed area.
Remove thoroughly since the smooth and slippery surface will be formed on the floor.
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: Wash hand thoroughly after handling.
Prevents Handling of Incompatible Substances or Mixtures: Protect from high temperature and direct sunlight.
Specific Hygiene Measures: Refer to “Section 10 – STABILITY AND REACTIVITY”.

Storage Precautionary Statements  
Technical Measures: 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 locked up.
Material Used in Packaging/Containers: Packaging materials and containers are not legislated, but use sturdy and closed-type containers.

Section 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION  

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

Personal Protective Equipment  
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: grey

Odour: odorless
Odour threshold: No data available
pH: No data available
Melting Point/Freezing Point: No data available
Initial Boiling Point and Boiling Ranges: No data available
Flash Point: No data available
Evaporation Rate: No data available
Flammability (solid, gas): No data available
Flammability or Explosive Limits: 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 |
| Imcompatible 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. 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

| International Regulations Regulatory Information by Sea Marine Pollutant | Not applicable | 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**

<table>
<thead>
<tr>
<th>Information Contact</th>
<th>No information available</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other Property</td>
<td>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 leagal responsibility for use of or reliance upon this information.</td>
</tr>
</tbody>
</table>
Safety Data Sheet (SDS)

Preparation Date 2011/11/18
Revision Date 2017/01/13

Section 1 - CHEMICALS AND COMPANY IDENTIFICATION

Chemical Identifier WDF1-P
Product Code WDF1P00001
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 03-5695-7210
Recommended Use and Restriction on Use ink

Section 2 - HAZARDS IDENTIFICATION

GHS Classification

Health Hazards Serious eye damage/eye irritation Category 2B
Specific target organ toxicity (single exposure)
Category 1(respiratory apparatus,heart,kidney,central nervous system)
Specific target organ toxicity (repeated exposure)
Category 1(respiratory apparatus,heart,central nervous system)
Other hazards than mentioned above are Not applicable or Classification not possible.

GHS Label Elements

Symbols

Signal Word Danger
Hazard Statements H320 Causes eye irritation
H370 Causes damage to respiratory apparatus,heart,kidney,central nervous system
H372 Causes damage to respiratory apparatus,heart,central nervous system through prolonged or repeated exposure

Precautionary Statements

Prevention Do not breathe mist, vapours and spray.(P260)
Wash hand thoroughly after handling.(P260)
Wash eye thoroughly after handling.(P264)
Do not eat, drink or smoke when using this product.(P270)
Response
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.(P305+P351+P338)
Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

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

<table>
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<tr>
<th>Chemical Name or Generic Name</th>
<th>Concentration or Ranges</th>
<th>Formula</th>
<th>ENCS No./ISHL No.</th>
<th>CAS RN</th>
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<td>0.5%</td>
<td>(3)–558 (7)–78 (9)–1277</td>
<td>Existing</td>
<td>122–99–6</td>
</tr>
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</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.

Section 6 - ACCIDENTAL RELEASE MEASURES

Environmental Precautions: 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. After removal, flush contaminated area thoroughly with water.

Methods and Equipment for Containment and Cleaning up: 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.
Prevention Measures for Secondary Accidents

Prevent flowing into drain, sewage, basement, and closed area. Remove thoroughly since the smooth and slippery surface will be formed on the floor.

Section 7 – HANDLING AND STORAGE

Handling

Technical Measures
Precautions for Safe Handling
Prevents Handling of Imcompatible Substances or Mixtures
Specific Hygiene Measures

Storage Precautionary Statements

Technical Measures
Material Used in Packaging/Container

Section 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls

Personal Protective Equipment
Eye Protection

Section 9 – PHYSICAL AND CHEMICAL PROPERTIES

Appearance
Physical State
Form
Colour

Odour
Odour threshold
pH
Melting Point/Freezing Point
Initial Boiling Point and Boiling Ranges
Flash Point
Evaporation Rate
Flammability (solid, gas)
Flammability or Explosive Limits
Vapour Pressure
Vapour Density

liquid
liquid
pink
odorless
No data available
No data available
No data available
No data available
No data available
No data available
No data available
No data available
No data available
No data available
No data available
No data available
Specific Gravity (Density) No data available
Partition Coefficient : n-Octanol/Water No data available
Auto-Ignition No data available
Decomposition Temperature No data available
Viscosity 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
Imcompatible 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. 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
International Regulations Regulatory Information by Sea Not applicable
<table>
<thead>
<tr>
<th>Marine Pollutant Transport in bulk according to MARPOL 73/78, Annex II, and the IBC code</th>
<th>Not applicable</th>
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<tbody>
<tr>
<td>Regulatory Information by Air</td>
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<tr>
<td>Regulatory Information by Road or Rail</td>
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</tr>
<tr>
<td>Regulatory Information by Sea</td>
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<tr>
<td>Regulatory Information by Air</td>
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<td>Emergency Response Guide Number</td>
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**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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</tr>
</thead>
<tbody>
<tr>
<td>Other Property</td>
<td>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.</td>
</tr>
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</table>
### Safety Data Sheet (SDS)

**Preparation Date** 2011/11/18  
**Revision Date** 2017/01/13

#### Section 1 - CHEMICALS AND COMPANY IDENTIFICATION

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<th>Chemical Identifier</th>
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<tbody>
<tr>
<td>Product Code</td>
<td>WDF1S00001</td>
</tr>
<tr>
<td>Company Name</td>
<td>PENTEL CO., LTD.</td>
</tr>
<tr>
<td>Address</td>
<td>7-2,KOAMICHO,NIHONBASHI,CHUO-KU,TOKYO</td>
</tr>
<tr>
<td>Company Contact</td>
<td>QUALITY ASSURANCE DEPARTMENT I</td>
</tr>
<tr>
<td>Phone Number</td>
<td>03-5695-7210</td>
</tr>
<tr>
<td>Fax Number</td>
<td>03-5645-8204</td>
</tr>
<tr>
<td>Mail Address</td>
<td><a href="mailto:hinpo@pentel.co.jp">hinpo@pentel.co.jp</a></td>
</tr>
<tr>
<td>Emergency Phone</td>
<td>03-5695-7210</td>
</tr>
<tr>
<td>Number</td>
<td>ink</td>
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<tr>
<td>Recommended Use and Restriction on Use</td>
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#### Section 2 - HAZARDS IDENTIFICATION

**GHS Classification**

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<tr>
<th>Health Hazards</th>
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<tbody>
<tr>
<td>Acute toxicity – oral Category 4</td>
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<tr>
<td>Serious eye damage/eye irritation Category 2B</td>
</tr>
<tr>
<td>Specific target organ toxicity (single exposure)</td>
</tr>
<tr>
<td>Category 1(respiratory apparatus,heart,kidney,central nervous system)</td>
</tr>
<tr>
<td>Specific target organ toxicity (repeated exposure)</td>
</tr>
<tr>
<td>Category 1(respiratory apparatus,heart,central nervous system)</td>
</tr>
<tr>
<td>Other hazards than mentioned above are Not applicable or Classification not possible.</td>
</tr>
</tbody>
</table>

**GHS Label Elements**

<table>
<thead>
<tr>
<th>Symbols</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="Safety Symbol" /></td>
</tr>
<tr>
<td><img src="image" alt="Hazard Symbol" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Signal Word</th>
<th>Danger</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazard Statements</td>
<td>H302 Harmful if swallowed</td>
</tr>
<tr>
<td></td>
<td>H320 Causes eye irritation</td>
</tr>
<tr>
<td></td>
<td>H370 Causes damage to respiratory apparatus,heart,kidney,central nervous system</td>
</tr>
<tr>
<td></td>
<td>H372 Causes damage to respiratory apparatus,heart,central nervous system through prolonged or repeated exposure</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Precautionary Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prevention</td>
</tr>
<tr>
<td>Wash hand thoroughly after handling.(P260)</td>
</tr>
<tr>
<td>Wash eye thoroughly after handling.(P264)</td>
</tr>
<tr>
<td>Do not eat, drink or smoke when using this product.(P270)</td>
</tr>
</tbody>
</table>
Section 3 – COMPOSITION / INFORMATION ON INGREDIENTS

<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>Ethylene glycol</td>
<td>22%</td>
<td>HOCH₂CH₂OH</td>
<td>(2)-230</td>
<td>Existing</td>
</tr>
<tr>
<td>Sodium fluoride</td>
<td>0.3%</td>
<td>NaF</td>
<td>(1)-332</td>
<td>Existing</td>
</tr>
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</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.

Section 6 – ACCIDENTAL RELEASE MEASURES

Environmental Precautions
This product is water pollutant and should be prevented from contaminating soil or from entering sewage and drainage systems and bodies of water.

Methods and Equipment for Containment and Cleaning 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

Wash hand thoroughly after handling.

Prevents Handling of Incompatible Substances or Mixtures

Protect from high temperature and direct sunlight.

Specific Hygiene Measures

Do not eat, drink or smoke when using this product. Wash hand thoroughly after handling.

Storage Precautionary Statements

Technical Measures

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 locked up.

Wear eye protection.

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

Section 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls

Good general ventilation should be sufficient to control airborne levels.

Personal Protective Equipment

Eye Protection

Wear eye protection.

Section 9 – PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical State - liquid

Form - liquid

Colour - sky blue

Odour - odorless

Odour threshold - No data available

pH - No data available

Melting Point/Freezing Point - No data available

Initial Boiling Point and Boiling Ranges - No data available

Flash Point - No data available

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)  
Partition Coefficient : n-Octanol/Water  
Auto-Ignition  
Decomposition Temperature  
Viscosity  
Kinematic viscosity  

Section 10 - STABILITY AND REACTIVITY  
Reactivity Chemical stability Possibility of Hazardous Reaction Conditions to Avoid Incompatible Substances or Mixtures Hazardous Decomposition Products  

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  

Section 12 - ECOLOGICAL INFORMATION  
Hazardous to the aquatic environment (acute) Hazardous to the aquatic environment (long-term) Hazardous to the ozone layer  

Section 13 - DISPOSAL CONSIDERATIONS  
Residual Waste Contaminated Container and Packaging  

Section 14 - TRANSPORT INFORMATION  
International Regulations Regulatory Information by Sea

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. Recycle containers after cleansing, or carry out the disposal under the related laws and regulations and the standards of the local governments.
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
Other Property
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.
Safety Data Sheet (SDS)

Preparation Date  2011/11/18
Revision Date  2017/01/13

Section 1 - CHEMICALS AND COMPANY IDENTIFICATION

Chemical Identifier        WDF9-V
Product Code                WDF9V00001
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

Health Hazards
Serious eye damage/eye irritation Category 2B
Reproductive toxicity Category 2
Specific target organ toxicity (single exposure) Category 2 (respiratory apparatus, heart, kidney, central nervous system)
Specific target organ toxicity (repeated exposure) Category 2 (liver, respiratory apparatus, heart, central nervous system, kidney)
Other hazards than mentioned above are Not applicable or Classification not possible.

GHS Label Elements

Symbols

Signal Word
Warning

Hazard Statements
H320 Causes eye irritation
H361 Suspected of damaging fertility or the unborn child
H371 May cause damage to respiratory apparatus, heart, kidney, central nervous system
H373 May cause damage to liver, respiratory apparatus, heart, kidney, central nervous system through prolonged or repeated exposure

Precautionary Statements

Prevention
Wear protective gloves. (P280)

Do not breathe mist, vapours and spray. (P260)
Wash hand thoroughly after handling. (P264)
Wash eye thoroughly after handling. (P264)
Do not eat, drink or smoke when using this product. (P270)
Section 3 – COMPOSITION / INFORMATION ON INGREDIENTS

Mixture

<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>Ethylene glycol</td>
<td>9%</td>
<td>HOCH2CH₂OH</td>
<td>(2)–230</td>
<td>Existing</td>
<td>107–21–1</td>
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<tr>
<td>Propylene glycol</td>
<td>2.4%</td>
<td>HOCH2CH(OH)CH₃</td>
<td>(2)–234</td>
<td>2–(8)–321</td>
<td>2–(8)–323</td>
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<tr>
<td>Diethylene glycol</td>
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<td>(2)–415</td>
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<tr>
<td>2-Phenoxyethanol</td>
<td>0.5%</td>
<td></td>
<td>(3)–558</td>
<td>(7)–78</td>
<td>(9)–1277</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.

Section 6 – ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures
Stay upwind. Keep out of low areas.
Environmental Precautions

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.

Methods and Equipment for Containment and Cleaning up

After removal, flush contaminated area thoroughly with water.

Prevention Measures for Secondary Accidents

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.

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

Avoid contact with eyes.
Wash hand thoroughly after handling.
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

Technical Measures

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 locked up.

Material Used in Packaging/Containers

Packaging materials and containers are not legislated, but use sturdy and closed–type containers.

Section 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls

Good general ventilation should be sufficient to control airborne levels.

Personal Protective Equipment

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: purple

Odour: odorless

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

Section 10 - STABILITY AND REACTIVITY
Reactivity
Chemical stability
Possibility of Hazardous Reaction
Conditions to Avoid
Imcompatible Substances or Mixtures
Hazardous Decomposition Products

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

Section 12 - ECOLOGICAL INFORMATION
Hazardous to the aquatic environment (acute)
Hazardous to the aquatic environment (long–term)
Hazardous to the ozone layer

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.

<table>
<thead>
<tr>
<th>Section 14 – TRANSPORT INFORMATION</th>
<th>Regulatory Information by Sea</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Marine Pollutant Transport in bulk according to MARPOL 73/78, Annex II, and the IBC code</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Regulations in Japan</td>
<td>Regulatory Information by Air</td>
<td>Not applicable</td>
</tr>
<tr>
<td></td>
<td>Information by Road or Rail</td>
<td>Not applicable</td>
</tr>
<tr>
<td></td>
<td>Regulatory Information by Sea</td>
<td>Not applicable</td>
</tr>
<tr>
<td></td>
<td>Marine Pollutant Transport in bulk according to MARPOL 73/78, Annex II, and the IBC code</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Emergency Response Guide Number</td>
<td>Information by Air</td>
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</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.
Section 1 - CHEMICALS AND COMPANY IDENTIFICATION

Chemical Identifier: WDF1-Y
Product Code: WDF1Y00001
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: ink

Section 2 - HAZARDS IDENTIFICATION

GHS Classification

Health Hazards: Serious eye damage/eye irritation Category 2B
Specific target organ toxicity (single exposure) Category 1(respiratory apparatus,heart,kidney,central nervous system)
Specific target organ toxicity (repeated exposure) Category 1(respiratory apparatus,heart,central nervous system)
Other hazards than mentioned above are Not applicable or Classification not possible.

GHS Label Elements

Symbols

Signal Word: Danger
Hazard Statements: H320 Causes eye irritation
H370 Causes damage to respiratory apparatus,heart,kidney,central nervous system
H372 Causes damage to respiratory apparatus,heart,central nervous system through prolonged or repeated exposure

Precautionary Statements
Prevention: Do not breathe mist, vapours and spray.(P260)

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

Precautionary Statements: Wash hand thoroughly after handling.(P260)
Wash eye thoroughly after handling.(P264)
Do not eat, drink or smoke when using this product.(P270)
Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Distinction of Substance</th>
<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>Mixture</td>
<td>Ethylene glycol</td>
<td>21%</td>
<td>HOCH2CH2OH</td>
<td>(2)–230</td>
<td>107–21–1</td>
</tr>
<tr>
<td></td>
<td>2-phenoxyethanol</td>
<td>0.5%</td>
<td>(3)–558 (7)–78 (9)–1277</td>
<td>Existing</td>
<td>122–99–6</td>
</tr>
<tr>
<td></td>
<td>Impurities and/or Stabilizing Additives which Contribute to the</td>
<td>No information available</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.

Section 6 - ACCIDENTAL RELEASE MEASURES

Environmental Precautions
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.
After removal, flush contaminated area thoroughly with water.

Methods and Equipment for Containment and Cleaning up
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.
Prevention Measures for Secondary Accidents

Prevent flowing into drain, sewage, basement, and closed area.
Remove thoroughly since the smooth and slippery surface will be formed on the floor.

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
Wash hand thoroughly after handling.

Prevents Handling of Incompatible Substances or Mixtures
Protect from high temperature and direct sunlight.

Specific Hygiene Measures
Refer to “Section 10 – STABILITY AND REACTIVITY”.

Storage Precautionary Statements
Wash hand thoroughly after handling.

Technical Measures
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 locked up.

Material Used in Packaging/Container
Packaging materials and containers are not legislated, but use sturdy and closed-type containers.

Section 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

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

Personal Protective Equipment
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
yellow ochre

Odour
odorless
Odour threshold
No data available
pH
No data available
Melting Point/Freezing Point
No data available
Initial Boiling Point and Boiling Ranges
No data available
Flash Point
No data available
Evaporation Rate
No data available
Flammability (solid, gas)
No data available
Flammability or Explosive Limits
No data available
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 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
Imcompatible 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.
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
International Regulations Regulatory Information by Sea  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
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