

Safety Data Sheet (SDS)

Preparation Date 2013/04/20

Revision Date 2016/01/12

Section 1 – CHEMICALS AND COMPANY IDENTIFICATION

Chemical Identifier WDR11-A
 Product Code WDR11A0001
 Company Name PENTEL CO., LTD.
 Address 7-2,KOAMICHO,NIHONBASHI,CHUO-KU,TOKYO
 Company Contact QUALITY ASSURANCE DEPARTMENT I
 Phone Number 048-928-6668
 Fax Number 048-928-9190
 Mail Address hinpo@pentel.co.jp
 Emergency Phone Number 048-928-6668
 Recommended Use and Restriction on Use ink

LRN5/7,LRN5H,LRNT5,LR7/10,BLN15/23/25,BL1
 7/27/30/107-A,BL60,BL110-A

Section 2 – HAZARDS IDENTIFICATION

GHS Classification

Health Hazards Serious eye damage/eye irritation Category 2B
 Specific target organ toxicity (single exposure)
 Category 2(respiratory apparatus,heart,kidney,central nervous system)
 Specific target organ toxicity (repeated exposure)
 Category 2(respiratory apparatus,heart,central nervous system)
 Environmental Hazards Hazard to the aquatic environment (acute hazard)
 Category 2
 Hazard to the aquatic environment (long-term hazard) Category 2
 Other hazards than mentioned above are Not applicable or No data available.

GHS Label Elements

Symbols



Signal Word Warning
 Hazard Statements H320 Causes eye irritation
 H371 May cause damage to respiratory apparatus,heart,kidney,central nervous system
 H373 May cause damage to respiratory apparatus,heart,central nervous system through prolonged or repeated exposure
 H411 Toxic to aquatic life with long lasting effects
 Precautionary Statements Prevention
 Precautionary Statements Do not get in eyes, on skin, or on clothing.(P262)

| | |
|---|---|
| Response Precautionary Statements | IF exposed or concerned: Call a POISON CENTER/doctor/...(P308+P311) IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.(P305+P351+P338) If eye irritation persists: Get medical advice and attention.(P337+P313) IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.(P301+P330+P331) IF ON SKIN: Gently wash with plenty of soap and water.(P302+P350) Store locked up.(P405) |
| Storage Precautionary Statements | |
| Disposal 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

Distinction of Substance
or Mixture

mixture

| Chemical Name or Generic Name | Concentration or Its Ranges | Formula | ENCS No./ISHL No. | | CAS RN |
|----------------------------------|--------------------------------|--|-------------------------|----------|-----------|
| | | | ENCS No. | ISHL No. | |
| Glycerin | 8.79% | CH ₂ OHCH (OH)C H ₂ OH | (2)- 242,(7)- 338 | Existing | 56-81-5 |
| Ethylene glycol | 7% | HOCH ₂ CH 2OH | (2)-230 | Existing | 107-21-1 |
| Ammonia | 0.3% | | (1)-391 | Existing | 7664-41-7 |
| Triethanolamine | 0.3% | N(CH ₂ CH ₂ OH) ₃ | (2)-308 | Existing | 102-71-6 |
| Thiodiglycol | 9.5% | HOCH ₂ CH 2SCH ₂ C H ₂ OH | (2)-470 | Existing | 111-48-8 |

Impurities and/or
Stabilizing Additives which
Contribute to the

No information available

Section 4 – FIRST AID MEASURES

Inhalation

Remove person to fresh air and keep comfortable
for breathing.
Get medical advice and attention if you feel unwell.

Skin Contact

Immediately rinse skin with water.
Get medical advice and attention if you feel unwell.

Eye Contact

Wash with plenty of soap and water.
If skin irritation or rash occurs, get medical advice
and attention.
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. Prevent flowing into drain, sewage, basement, and closed area.
Remove thoroughly since the smooth and slippery surface will be formed on the floor.

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.
Avoid swallowing.
Protect from high temperature and direct sunlight.

Prevents Handling of
Incompatible
Substances or
Mixtures
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/Container
s

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 (viscous liquid) |
| | Colour | black |
| Odour | | slight odor |
| 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 Temperature | | No data available |
| Viscosity | | No data available |
| Kinematic viscosity | | No data available |

Section 10 – STABILITY AND REACTIVITY

| | |
|-------------------------------------|-------------------|
| Reactivity | No data available |
| Chemical stability | No data available |
| Possibility of Hazardous Reaction | No data available |
| Conditions to Avoid | No data available |
| Incompatible Substances or Mixtures | No data available |
| Hazardous Decomposition Products | No data available |

Section 11 – TOXICOLOGICAL INFORMATION

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

Section 12 – ECOLOGICAL INFORMATION

| | |
|--|-------------------|
| Hazard to the aquatic environment (acute) | No data available |
| Hazard to the aquatic environment (long-term hazard) | No data available |
| Hazard to the ozone layer | No data available |

Section 13 – DISPOSAL CONSIDERATIONS

| | |
|--------------------------------------|--|
| Residual Waste | For disposal, conform with the standards provided by related laws and local public bodies. 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 |
| | Regulatory Information by Air | Not applicable |
| Regulations in Japan | Regulatory Information by Road or Rail | Not applicable |
| | Regulatory Information by Sea | Not applicable |
| | Marine Pollutant Transport in bulk according to MARPOL 73/78, Annex II, and the IBC code | Not applicable |
| | Regulatory Information by Air | 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 |
| 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 2012/06/06

Revision Date 2015/03/11

Section 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name WDR13-B
 Product Code WDR13B0001
 Company Name PENTEL CO., LTD.
 Address 7-2,KOAMICHO,NIHONBASHI,CHUO-KU,TOKYO
 Company Contact QUALITY ASSURANCE DEPARTMENT I
 Phone Number 048-928-6668
 Emergency Phone Number 048-928-6668
 Fax Number 048-928-9190
 Mail Address hinpo@pentel.co.jp
 Recommended Use ink
 and Restriction on Use

BL107-B, BL110-B, BL27-B, BL30-B, BL17-B, BL20-B,
 BLN77-B, BL77-B, BL57-B, BL60-B, LR7-B, LRN7-B, LR10-B

Section 2 – HAZARDS IDENTIFICATION

GHS Classification

Health Hazards Acute toxicity – inhalation(gas) Category 4
 Serious eye damage/eye irritation Category 2B
 Sensitization – respiratory Category 1
 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(central nervous
 system,liver,respiratory apparatus,heart,kidney)

Environmental Hazards Acute hazards to the aquatic environment
 Category 2
 Chronic hazards to the aquatic environment
 Category 2
 Other hazards than mentioned above are Not
 applicable or No data available.

GHS Label Elements
Symbols

Signal Word Danger

Hazard Statements H320 Causes eye irritation
 H332 Harmful if inhaled
 H334 May cause allergy or asthma symptoms or
 breathing difficulties if inhaled
 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.
 H401 Toxic to aquatic life
 H411 Toxic to aquatic life with long lasting effects

Precautional
Statements
Prevention
Precautionary
Statements

Obtain special instructions before use.(P201)

Do not handle until all safety precautions have
 been read and understood.(P202)
 Do not breathe mist, vapours and spray.(P260)
 Avoid breathing gas.(P261)
 Wash hands thoroughly after handling.(P264)

Response
Precautionary
Statements

Wash eye thoroughly after handling.(P264)
Do not eat, drink or smoke when using this product.(P270)
Use only outdoors or in a well-ventilated area.(P271)
Avoid release to the environment.(P273)
Use personal protective equipment as required.(P281)
In case of inadequate ventilation wear respiratory protection.(P285)
IF INHALED: Call a doctor if you feel unwell.(P304+P312)

IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.(P304+P341)
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.(P305+P351+P338)
IF exposed or if you feel unwell: Call a doctor.(P309+P311)
Get medical advice and attention if you feel unwell.(P314)
If eye irritation persists: Get medical advice and attention.(P337+P313)
If experiencing respiratory symptoms: Call a doctor.(P342+P311)
Collect spillage.(P391)
Store locked up.(P405)

Storage
Precautionary
Statements

Disposal
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

Distinction of Substance or Mixture
mixture

| Chemical Name or Generic Name | Concentration or Its Ranges | Formula | ENCs No./ISHL No. | | CAS RN |
|-------------------------------|-----------------------------|--|--------------------------|----------|----------|
| | | | ENCs No. | ISHL No. | |
| glycerin | 7.3% | CH ₂ OHCH(OH)C H ₂ OH | (2)- 242,(7)- 338 | Existing | 56-81-5 |
| ethylene glycol | 9.7% | HOCH ₂ CH 2OH | (2)-230 | Existing | 107-21-1 |
| diethylene glycol | 7.3% | HOCH ₂ CH 2OCH ₂ C H ₂ OH | (2)- 415,(2)- 2979 | Existing | 111-46-6 |

Impurities and/or Stabilizing Additives which Contribute to the Classification
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 soap and plenty of water.
If skin irritation or rash occurs: Get medical advice and attention.

Eye Contact
Wash eyes carefully for several minutes with water. Take off contact lenses if easily removed, and continue to wash eyes afterwards.
When the ocular stimulation lasts, Seek medical treatment and advice.

Ingestion
Rinse a mouth. Don't make vomit by force.

Get medical advice and attention if you feel unwell.

Section 5 – FIRE FIGHTING MEASURES

Extinguishing Media

Carbon dioxide, dry chemicals, water sprinkling, and general foam extinguishing agents

Section 6 – ACCIDENTAL RELEASE MEASURES

Personal Precautions,
Protective Equipment and
Emergency Procedures
Environmental
Precautions

No information available

Decontamination/Absorption/
Sweeping/Vacuuming/
Neutralization

Pay attention not to cause the influence on the environment by discharging into rivers.
This product is water pollutant. Prevent soil contamination, or the product from flowing into the drain systems.

Collect the material into a disposal container by sucking up or sweeping up.

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

Absorb spills with inert materials (such as dry sand or soil) and collect them into chemical-waste disposal container.

Cleansing the contaminated area thoroughly with water after removal.

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 "8. EXPOSURE CONTROLS AND PERSONAL

Local and General
Ventilation

Provide local ventilations and a full ventilation system as described in "8. EXPOSURE CONTROLS AND PERSONAL PROTECTION."

Precautions for Safe
Handling

Avoid the contact with eyes.

Wash hands thoroughly after handling.
Avoid swallowing
Avoid high temperature and direct sunlight.

Prevents Handling of
Incompatible
Substances or
Mixtures

Refer to "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.

Incompatible
Substances or
Mixtures

Refer to "10. STABILITY AND REACTIVITY"

Storage Conditions

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

A general proper ventilation is enough to control concentration in air.

Personal Protective
Equipment

Respiratory
Protection

No information available

Eye Protection

Use an adequate personal eye protector.
Goggles (ordinary glass type, ordinary glass type with side shields, and goggle type)

Specific Hygiene Measures

Wash hands thoroughly after handling.

Section 9 – PHYSICAL AND CHEMICAL PROPERTIES

| | | |
|--|----------------|--------------------------|
| Appearance | Physical State | liquid (viscous liquid) |
| | Colour | red |
| | Odour | slight odor |
| | pH | No data available |
| Initial Boiling Point and Boiling Ranges | | No information available |
| Flash Point | | no data available |
| Auto-Ignition | | No information available |

Section 10 – STABILITY AND REACTIVITY

| | | |
|-----------------------------------|--|--|
| Stability | | The material is stable under storage and handling conditions comprised with the regulations. |
| Possibility of Hazardous Reaction | | No data available |
| Conditions to Avoid | | No data available |
| Hazardous Decomposition Products | | No data available |

Section 11 – TOXICOLOGICAL INFORMATION

| | | |
|----------------|--|--------------------------|
| Acute Toxicity | | No information available |
|----------------|--|--------------------------|

Section 12 – ECOLOGICAL INFORMATION

| | | |
|-------------|-----------------------|--------------------------|
| | Environmental Hazards | No information available |
| Ecotoxicity | | No information available |

Section 13 – DISPOSAL CONSIDERATIONS

| | | |
|--------------------------------------|--|---|
| Residual Waste | | For disposal, conform with the standards provided by related laws and local public bodies. Commission the authorized waste disposal company, or a local public body who conducts the disposal, 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 |
| | UN No. | Not applicable |
| | Marine Pollutant | Not applicable |
| | Regulatory Information by Air | Not applicable |
| | UN No. | Not applicable |
| Regulations in Japan | Regulatory Information by Road or Rail | Not applicable |
| | Regulatory Information by Sea | Not applicable |
| | UN No. | Not applicable |
| | Marine Pollutant | Not applicable |
| | Regulatory Information by Air | Not applicable |
| | UN No. | 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 2014/08/12

Revision Date 2016/01/12

Section 1 – CHEMICALS AND COMPANY IDENTIFICATION

Chemical Identifier WDR20-C
 Product Code WDR20C0001
 Company Name PENTEL CO., LTD.
 Address 7-2,KOAMICHO,NIHONBASHI,CHUO-KU,TOKYO
 Company Contact QUALITY ASSURANCE DEPARTMENT I
 Phone Number 048-928-6668
 Fax Number 048-928-9190
 Mail Address hinpo@pentel.co.jp
 Emergency Phone Number 048-928-6668
 Recommended Use and Restriction on Use ink
 BLN15/23/25/55/75/77/105,BL17/20/27/30/57/60/77/80/107/110,LRN5/7,LR7/10,LRNT5-C

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 No data available.

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

| | |
|---|---|
| Prevention Measures for Secondary Accidents | 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. 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. Avoid swallowing. Avoid contact with eyes. Protect from high temperature and direct sunlight. |
| Storage Precautionary Statements | Prevents Handling of Incompatible Substances or Mixtures | Refer to "Section 10 – STABILITY AND REACTIVITY". |
| | Technical Measures | Refer to "Section 10 – STABILITY AND REACTIVITY". Have containers keep away from direct sunlight and heat. Keep away from heat. |

Section 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

| | | |
|-------------------------------|--------------------------|---|
| Engineering Controls | | Good general ventilation should be sufficient to control airborne levels. |
| Personal Protective Equipment | Respiratory Protection | Use personal respiratory equipment as required. |
| | Hand Protection | Use personal gloves as required. |
| | Eye Protection | Use personal eye protection as required. |
| | Skin and Body Protection | Use personal protective clothing and face protection as required. |

Section 9 – PHYSICAL AND CHEMICAL PROPERTIES

| | | |
|--|----------------|-------------------------|
| Appearance | Physical State | liquid |
| | Form | liquid (viscous 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 |
| 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 Temperature | No data available |
| Viscosity | No data available |
| Kinematic viscosity | No data available |

Section 10 – STABILITY AND REACTIVITY

| | |
|--|-------------------|
| Reactivity | No data available |
| Chemical stability | No data available |
| Possibility of Hazardous Reaction | No data available |
| Conditions to Avoid | No data available |
| Incompatible Substances or Mixtures | No data available |
| Hazardous Decomposition Products | No data available |

Section 11 – TOXICOLOGICAL INFORMATION

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

Section 12 – ECOLOGICAL INFORMATION

| | |
|--|-------------------|
| Hazard to the aquatic environment (acute) | No data available |
| Hazard to the aquatic environment (long-term hazard) | No data available |
| Hazard 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 |
| | Marine Pollutant | Not applicable |

| | | |
|---------------------------------|--|----------------|
| | Transport in bulk according to MARPOL 73/78, Annex II, and the IBC code | Not applicable |
| Regulations in Japan | Regulatory Information by Air | Not applicable |
| | Regulatory Information by Road or Rail | Not applicable |
| | Regulatory Information by Sea | Not applicable |
| | Marine Pollutant Transport in bulk according to MARPOL 73/78, Annex II, and the IBC code | Not applicable |
| | Regulatory Information by Air | 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
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 leagal responsibility for use of or reliance upon this information.

Safety Data Sheet (SDS)

Preparation Date 2014/08/12

Revision Date 2016/01/12

Section 1 – CHEMICALS AND COMPANY IDENTIFICATION

Chemical Identifier WDR20-D
 Product Code WDR20D0001
 Company Name PENTEL CO., LTD.
 Address 7-2,KOAMICHO,NIHONBASHI,CHUO-KU,TOKYO
 Company Contact QUALITY ASSURANCE DEPARTMENT I
 Phone Number 048-928-6668
 Fax Number 048-928-9190
 Mail Address hinpo@pentel.co.jp
 Emergency Phone Number 048-928-6668
 Recommended Use ink
 and Restriction on Use
 BLN75,BLN77,BL17,BL27,BL57,BL60,BL77,BL80,BL107,LR7,LRN5-D

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 No data available.

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.(P264)
 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)
IF exposed or concerned: Call a POISON CENTER/doctor/...(P308+P311)
Get medical advice and attention if you feel unwell.(P314)
Specific treatment.(P321)
If eye irritation persists: Get medical advice and attention.(P337+P313)
Store locked up.(P405)

Storage
Precautionary
Statements

Disposal
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

Distinction of Substance
or Mixture
mixture

| Chemical Name or Generic Name | Concentration or Its Ranges | Formula | ENCS No./ISHL No. | | CAS RN |
|-------------------------------|-----------------------------|---|-------------------|----------|----------|
| | | | ENCS No. | ISHL No. | |
| Ethylene glycol | 12.6% | HOCH ₂ CH ₂ OH | (2)-230 | Existing | 107-21-1 |
| Glycerin | 8.6% | CH ₂ OHCH(OH)C H ₂ OH | (2)-242,(7)-338 | Existing | 56-81-5 |
| Thiodiglycol | 9.4% | HOCH ₂ CH ₂ SCH ₂ CH ₂ OH | (2)-470 | Existing | 111-48-8 |

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

Section 4 – FIRST AID MEASURES

Inhalation
Skin Contact
Eye Contact
Call a doctor if you feel unwell.
Wash with soap and water.
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.

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.
Vacuum or sweep up material and place in a disposal container.

Methods and Equipment
for Containment and
Cleaning up

| | |
|---|---|
| Prevention Measures for Secondary Accidents | 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. 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. Avoid swallowing. Avoid contact with eyes. Protect from high temperature and direct sunlight. |
| Storage Precautionary Statements | Prevents Handling of Incompatible Substances or Mixtures | Refer to "Section 10 – STABILITY AND REACTIVITY". |
| | Technical Measures | Refer to "Section 10 – STABILITY AND REACTIVITY". Have containers keep away from direct sunlight and heat. Keep away from heat. |

Section 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

| | | |
|-------------------------------|--------------------------|---|
| Engineering Controls | | Good general ventilation should be sufficient to control airborne levels. |
| Personal Protective Equipment | Respiratory Protection | Use personal respiratory equipment as required. |
| | Hand Protection | Use personal gloves as required. |
| | Eye Protection | Use personal eye protection as required. |
| | Skin and Body Protection | Use personal protective clothing and face protection as required. |

Section 9 – PHYSICAL AND CHEMICAL PROPERTIES

| | | |
|--|----------------|-------------------------|
| Appearance | Physical State | liquid |
| | Form | liquid (viscous 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 | 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 |
| Incompatible Substances or Mixtures | No data available |
| Hazardous Decomposition Products | No data available |

Section 11 – TOXICOLOGICAL INFORMATION

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

Section 12 – ECOLOGICAL INFORMATION

| | |
|--|-------------------|
| Hazard to the aquatic environment (acute) | No data available |
| Hazard to the aquatic environment (long-term hazard) | No data available |
| Hazard 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 |
| | Marine Pollutant | Not applicable |

| | | |
|---------------------------------|--|----------------|
| | Transport in bulk according to MARPOL 73/78, Annex II, and the IBC code | Not applicable |
| Regulations in Japan | Regulatory Information by Air | Not applicable |
| | Regulatory Information by Road or Rail | Not applicable |
| | Regulatory Information by Sea | Not applicable |
| | Marine Pollutant Transport in bulk according to MARPOL 73/78, Annex II, and the IBC code | Not applicable |
| | Regulatory Information by Air | 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
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 leagal responsibility for use of or reliance upon this information.