

## Safety Data Sheet (SDS)

Preparation Date 2013/04/20  
Revision Date 2016/01/12

## Section 1 - CHEMICALS AND COMPANY IDENTIFICATION

Chemical Identification 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 ink  
 and Restriction on Use

LRN5/7, LRN5H, LRNT5, LR7/10, BLN15/23/25, BL17/27/30/107-A, BL60, BL110-A  
 BLN115 (A/W)-A, BL117 (A/W)-A

## Section 2 - HAZARDS IDENTIFICATION

## GHS Classification

Health Hazards Serious eye damage/eye irritation 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 (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

**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 <sub>2</sub> OHCH (OH)C H <sub>2</sub> OH	(2)- 242,(7)- 338	Existing	56-81-5
Ethylene glycol	7%	HOCH <sub>2</sub> CH 2OH	(2)-230	Existing	107-21-1
Ammonia	0.3%		(1)-391	Existing	7664-41-7
Triethanolamine	0.3%	N(CH <sub>2</sub> CH <sub>2</sub> OH) <sub>3</sub>	(2)-308	Existing	102-71-6
Thiodiglycol	9.5%	HOCH <sub>2</sub> CH 2SCH <sub>2</sub> C H <sub>2</sub> 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.

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. 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 leagal responsibility for use of or reliance upon this information.

## Safety Data Sheet (SDS)

Preparation Date 2012/06/06  
Revision Date 2015/3/11

## 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  
 BL117(A/W)-B

## Section 2 - HAZARDS IDENTIFICATION

## GHS Classification

Health Hazards Acute toxicity - inhalation(gas) Category 4  
 Serious eye damage/eye irritation Category 7  
 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 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. (P261)

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%	CH2OHCH(OH)C H2OH	(2)-242,(7)-338	Existing	56-81-5
ethylene glycol	9.7%	HOCH2CH2OH	(2)-230	Existing	107-21-1
diethylene glycol	7.3%	HOCH2CH2OCH2C H2OH	(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
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**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 Identification 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 ink  
and Restriction on Use

BLN15/23/25/55/75/77/105, BL17/20/27/30/57/  
60/77/80/107/110, LRN5/7, LR7/10, LRNT5-C  
BLN115 (A/W) -C, BL117 (A/W) -C

## Section 2 - HAZARDS IDENTIFICATION

## GHS Classification

Health Hazards Serious eye damage/eye irritation Category  
Specific target organ toxicity (single expo  
Category 1 (respiratory  
apparatus, heart, kidney, central nervous syst  
Specific target organ toxicity (repeated ex  
Category 1 (respiratory apparatus, heart, cent  
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 syst  
H372 Causes damage to respiratory  
apparatus, heart, central nervous system thro  
prolonged or repeated exposure

Precautionary  
Statements

Prevention

Precautionary  
Statements

Do not breathe mist, vapours and spray. (P26

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

## 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)

Response  
Precautionary Statements  
Storage  
Precautionary Statements  
Disposal  
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)

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 <sub>2</sub> CH <sub>2</sub> OH	(2)-230	Existing	107-21-1
Glycerin	8.7%	CH <sub>2</sub> OHCH(OH)C H <sub>2</sub> OH	(2)-242,(7)-338	Existing	56-81-5
Thiodiglycol	9.4%	HOCH <sub>2</sub> CH <sub>2</sub> SCH <sub>2</sub> CH <sub>2</sub> 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.  
Rinse mouth. Do NOT induce vomiting.

Ingestion

**Section 5 – FIRE FIGHTING MEASURES**

Extinguishing Media

Dry chemicals, CO<sub>2</sub>, 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.
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## 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
	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  
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 Identification 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  
 BLN115 (A/W)-D, BL117 (A/W)-D

## Section 2 - HAZARDS IDENTIFICATION

## GHS Classification

Health Hazards Serious eye damage/eye irritation Category 1  
 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. (P26)  
 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 <sub>2</sub> CH <sub>2</sub> OH	(2)-230	Existing	107-21-1
Glycerin	8.6%	CH <sub>2</sub> OHCH(OH)C <sub>2</sub> H <sub>4</sub> OH	(2)-242,(7)-338	Existing	56-81-5
Thiodiglycol	9.4%	HOCH <sub>2</sub> CH <sub>2</sub> SCH <sub>2</sub> CH <sub>2</sub> 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, CO<sub>2</sub>, 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.
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## 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  
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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 Identification WDR20-V  
 Product Code WDR20V0001  
 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

BLN15, BLN25, BLN75, BLN77, BL17, BL27, BL57, BL60, BL77, BL80, BL107, LRN7, LR7, LR10-V  
 BLN115 (A/W)-V, BL117 (A/W)-V

## Section 2 - HAZARDS IDENTIFICATION

## GHS Classification

Health Hazards Serious eye damage/eye irritation Category 1  
 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. (P261)  
 Precautionary Statements  
 Wash hand thoroughly after handling. (P264)  
 Wash eye thoroughly after handling. (P264)  
 Do not eat, drink or smoke when using this product. (P273)

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 <sub>2</sub> CH <sub>2</sub> OH	(2)-230	Existing	107-21-1
Glycerin	8.6%	CH <sub>2</sub> OHCH(OH)C <sub>2</sub> H <sub>4</sub> OH	(2)-242,(7)-338	Existing	56-81-5
Thiodiglycol	9.4%	HOCH <sub>2</sub> CH <sub>2</sub> SCH <sub>2</sub> CH <sub>2</sub> 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, CO<sub>2</sub>, 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.
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## 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	purple
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
	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  
Other Property

No information available  
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