

## 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 Do not get in eyes, on skin, or on clothing.(P262)  
 Precautionary Statements

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.

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 leagal responsibility for use of or reliance upon this information.

## Safety Data Sheet (SDS)

Preparation Date 2013/04/20

Revision Date 2017/07/24

## Section 1 – CHEMICALS AND COMPANY IDENTIFICATION

Chemical Identifier WDR14-B  
 Product Code WDR14B0001  
 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  
 and Restriction on Use (X)LRN5,LRN5H,LSN5H,XLRNT5,(X)LR7, LR10-B  
 BL107, BL110, BL117, BL17, BL27, BL57, BL60, BL80. BL77-B  
 BLN115, BLN15, BLN25, BLN75-B

## Section 2 – HAZARDS IDENTIFICATION

## GHS Classification

Health Hazards Acute toxicity (Inhalation: dust and mist) Category 4  
 Skin corrosion/irritation Category 2  
 Serious eye damage/eye irritation Category 1  
 Reproductive toxicity Category 2  
 Specific target organ toxicity (single exposure) Category 2(blood,kidney,central nervous system)  
 Specific target organ toxicity (repeated exposure) Category 2(liver,kidney)  
 Other hazards than mentioned above are Not applicable or Classification not possible.

## GHS Label Elements

## Symbols



Signal Word Danger  
 Hazard Statements H315 Causes skin irritation  
 H318 Causes serious eye damage  
 H332 Harmful if inhaled  
 H361 Suspected of damaging fertility or the unborn child  
 H371 May cause damage to blood,kidney,central nervous system  
 H373 May cause damage to liver,kidney through prolonged or repeated exposure  
 Precautionary Statements  
 Prevention Avoid breathing mist, vapours and spray.(P261)  
 Precautionary Statements  
 Wear protective gloves.(P280)  
 Wash hand thoroughly after handling.(P264)  
 Wash eye thoroughly after handling.(P264)

Response Precautionary Statements	<p>IF ON SKIN: Wash with plenty of soap and water.(P302+P352)</p> <p>If skin irritation or rash occurs, get medical advice and attention.(P333+P313)</p> <p>IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.(P304+P340)</p> <p>IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.(P305+P351+P338)</p> <p>If eye irritation persists: Get medical advice and attention.(P337+P313)</p> <p>IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.(P301+P330+P331)</p>
Storage Precautionary Statements	Store locked up.(P405)
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	Existing	56-81-5
Etylene glycol	9.72%	HOCH <sub>2</sub> CH 2OH	(2)-230	Existing	107-21-1
Diethylene glycol	7.3%	HOCH <sub>2</sub> CH 2OCH <sub>2</sub> C H <sub>2</sub> OH	(2)-415	Existing	111-46-6

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

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

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 breathing mist, vapours and spray. Avoid contact with eyes. Avoid swallowing. Protect from high temperature and direct sunlight.

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

Specific Hygiene Measures Wash hand thoroughly after handling.

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

Have containers keep away from direct sunlight and heat.

Keep away from heat.

Store 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 Hand Protection Wear protective gloves.



Eye Protection	Wear eye protection. Protection glasses (ordinary glasses, ordinary glasses with side shields, and goggles).
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	red
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
<b>Section 12 – ECOLOGICAL INFORMATION</b>		
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
<b>Section 13 – DISPOSAL CONSIDERATIONS</b>		
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. When commissioning the disposal to a disposal company, notify the danger and toxicity thoroughly to the company. Do not release waste liquid containing the product and used water for cleansing into rivers, etc., or do not discharge the concerned wastes intact for reclamation.
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. In case of disposal of empty containers, remove the content thoroughly.
<b>Section 14 – TRANSPORT INFORMATION</b>		
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	Not applicable
	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 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  
 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	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 2OH	(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 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  
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
<b>Section 10 – STABILITY AND REACTIVITY</b>	
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
<b>Section 11 – TOXICOLOGICAL INFORMATION</b>	
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
<b>Section 12 – ECOLOGICAL INFORMATION</b>	
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
<b>Section 13 – DISPOSAL CONSIDERATIONS</b>	
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.
<b>Section 14 – TRANSPORT INFORMATION</b>	
International Regulations	Regulatory Information by Sea
	Marine Pollutant
	Not applicable
	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 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,B  
 L107,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 <sub>2</sub> CH <sub>2</sub> OH	(2)-230	Existing	107-21-1
Glycerin	8.6%	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.

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  
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-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 and Restriction on Use ink

BLN15,BLN25,BLN75,BLN77,BL17,BL27,BL57,BL60,BL77,BL80,BL107,LRN7,LR7,LR10-V

## 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  
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Store locked up.(P405)

Storage  
Precautionary  
Statements

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mixture

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

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Skin Contact  
Eye Contact  
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Rinse mouth. Do NOT induce vomiting.

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Precautions  
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## 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
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	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**

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Other Property

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