

Safety Data Sheet (SDS)

Preparation Date 2013/04/20

Revision Date 2017/10/27

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 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

LRN5, 5H, 5TL-A, LR7, 10-A, BL17, 27, 57, 60, 77, 77PW, 77PWP, 80, 107, 110, 117, 117W, 407, 407A, 407LS, 407MA, 407P, 407X-A, BL77CA-A1,A2, BL 2007A-AE1, BLN15, 25, 75, 75TL, 105, 115, 115W-A

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
 Specific target organ toxicity (single exposure) Category 2(blood,kidney,central nervous system)
 Environmental Hazards Hazardous to the aquatic environment (acute) Category 3
 Hazardous to the aquatic environment (long-term) Category 3
 Other hazards than mentioned above are Not applicable or Classification not possible.

GHS Label Elements

Symbols



Signal Word

Danger

Hazard Statements

H315 Causes skin irritation
 H318 Causes serious eye damage
 H332 Harmful if inhaled
 H412 Harmful to aquatic life with long lasting effects
 H371 May cause damage to blood,kidney,central nervous system

Precautionary Statements

Avoid breathing mist, vapours and spray.(P261)

Precautionary Statements

Response

IF ON SKIN: Wash with plenty of soap and

Precautionary
Statements

water.(P302+P352)

	<p>If skin irritation or rash occurs, get medical advice and attention.(P333+P313)</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> <p>Store locked up.(P405)</p>
Storage Precautionary Statements Disposal Precautionary Statements	<p>Dispose of contents and container in accordance with local, regional and national regulations (to be specified).(P501)</p>

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	Existing	56-81-5
Ethylene glycol	7%	HOCH ₂ CH 2OH	(2)-230	Existing	107-21-1
Triethanolamine	0.27%	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

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 breathing mist, vapours and spray.
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

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

Respiratory Protection

Use personal respiratory equipment as required.

Hand Protection Eye Protection

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

Skin and Body Protection

Use personal face protection as required.

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 Lower Limit Limits	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

Hazardous to the aquatic environment (acute)	No data available
Hazardous to the aquatic environment (long-term)	No data available
Hazardous to the ozone layer	No data available

Section 13 – DISPOSAL CONSIDERATIONS**Residual Waste**

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

In case of disposal of empty containers, remove the content thoroughly.

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**

Not applicable

Information by Sea**Marine Pollutant**

Not applicable

Transport in bulk

Not applicable

according to**MARPOL****73/78,Annex II ,and****the IBC code****Regulatory**

Not applicable

Information by Air**Regulations in Japan****Regulatory**

Not applicable

Information by Road**or Rail****Regulatory**

Not applicable

Information by Sea**Marine Pollutant**

Not applicable

Transport in bulk

Not applicable

according to**MARPOL****73/78,Annex II ,and****the IBC code****Regulatory**

Not applicable

Information by Air**Emergency Response**

Not applicable

Guide Number**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 2013/04/20

Revision Date 2018/03/30

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
 LRN5, 5H-B、LR7-B、BL17, 27, 57, 60, 77, 77PW,
 80, 107, 110, 117A, 117W-B、BLN15, 25, 75, 105-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
Precautionary Statements

Avoid breathing mist, vapours and spray.(P261)

Wear protective gloves.(P280)
 Wash hand thoroughly after handling.(P264)

Response Precautionary Statements	<p>Wash eye thoroughly after handling.(P264)</p> <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 ₂ OHCH (OH)C H ₂ OH	(2)-242	Existing	56-81-5
Ethylene glycol	9.72%	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	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.

**Prevention Measures for
Secondary Accidents**

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 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/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	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		No data available
Temperature		
Viscosity		No data available
Kinematic viscosity		No data available

Section 10 – STABILITY AND REACTIVITY

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

Section 11 – TOXICOLOGICAL INFORMATION

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

Specific target organ toxicity (repeated exposure)	No data available
Aspiration Hazard	No data available

Section 12 – ECOLOGICAL INFORMATION

Hazardous to the aquatic environment (acute)	No data available
Hazardous to the aquatic environment (long-term)	No data available
Hazardous to the ozone layer	No data available

Section 13 – DISPOSAL CONSIDERATIONS

Residual Waste	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.

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	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 leagal responsibility for use of or reliance upon this information.

Safety Data Sheet (SDS)

Preparation Date 2014/08/12

Revision Date 2017/01/13

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 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

LRN5, 5H, 5TL-C, LR7, 10-C, BL17, 27, 57, 60,
 77, 77CA, 77PW, 80, 107, 107FC, 110, 117A,
 117W-C, BLN105, 115A, 115W-C

Section 2 – HAZARDS IDENTIFICATION

GHS Classification

Health Hazards Acute toxicity – inhalation (mist) Category 4
 Skin corrosion/irritation Category 2
 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 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
 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
StatementsPrevention
Precautionary
Statements

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

Wash hand thoroughly after handling.(P264)

Wash eye thoroughly after handling.(P264)

Response Precautionary Statements	Do not eat, drink or smoke when using this product.(P270) 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)
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.	
Ethylene glycol	12.6%	HOCH ₂ CH 2OH	(2)-230	Existing	107-21-1
Glycerin	8.7%	CH ₂ OHCH (OH)C H ₂ OH	(2)-242 (7)-338	Existing	56-81-5
Thiodiglycol	9.4%	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

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 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.

Methods and Equipment for Containment and Cleaning up	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.
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.
	Prevents Handling of Incompatible Substances or Mixtures	Refer to "Section 10 – STABILITY AND REACTIVITY".
Storage Precautionary Statements	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 Lower Limit Limits	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

Hazardous to the aquatic environment (acute)	No data available
Hazardous to the aquatic environment (long-term)	No data available
Hazardous to the ozone layer	No data available

Section 13 – DISPOSAL CONSIDERATIONS

Residual Waste	<p>Disposal should be in accordance with applicable regulations and standards by the respective local governments.</p> <p>Commission a waste disposal company, or a local public body who are licensed by local or regional government, to dispose of the material.</p>
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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	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	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 2016/07/21

Revision Date 2018/12/13

Section 1 – CHEMICALS AND COMPANY IDENTIFICATION

Chemical Identifier	WDR21-CA
Product Code	WDR21CA001
Company Name	PENTEL CO., LTD.
Address	7-2,KOAMICHO,NIHONBASHI,CHUO-KU,TOKYO
Company Contact	QUALITY ASSURANCE DEPARTMENT I
Phone Number	03-5695-7210
Fax Number	03-5645-8204
Mail Address	hinpo@pentel.co.jp
Emergency Phone Number	03-5695-7210
Recommended Use and Restriction on Use	ink LRN5, 5TL-CA, LR7-CA, BLN75TL, 105-CA, BL77, 107-CA

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 2A Specific target organ toxicity (single exposure) Category 2(blood,kidney,central nervous system) Other hazards than mentioned above are Not applicable or Classification not possible.
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GHS Label Elements

Symbols



Signal Word	Warning
Hazard Statements	H315 Causes skin irritation H319 Causes serious eye irritation H332 Harmful if inhaled H371 May cause damage to blood,kidney,central nervous system
Precautionary Statements	
Prevention	Avoid breathing 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.(P270) Wear protective gloves.(P280) Wear eye protection and face protection.(P280)
Response	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.(P304+P340)
Precautionary Statements	

	Get medical advice and attention if you feel unwell.(P314)
	If skin irritation or rash occurs, get medical advice and attention.(P333+P313)
	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)
Storage	Store locked up.(P405)
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	11.5%	CH ₂ OHCH (OH)C H ₂ OH	(2)-242	Existing	56-81-5
Ethylene glycol	5%	HOCH ₂ CH 2OH	(2)-230	Existing	107-21-1
Thiodiethylene glycol	9%	HOCH ₂ CH 2SCH ₂ C H ₂ OH	(2)-470	Existing	111-48-8
Triethanolamine	0.67%	N(CH ₂ CH ₂ OH) ₃	(2)-308	Existing	102-71-6

Impurities and/or
Stabilizing Additives which
Contribute to the

No information available

Section 4 – FIRST AID MEASURES

Inhalation

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

Skin Contact

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

Eye Contact

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

Ingestion

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

Section 5 – FIRE FIGHTING MEASURES

Extinguishing Media

Dry chemicals, CO₂, water spray or regular foam.

Section 6 – ACCIDENTAL RELEASE MEASURES

Environmental Precautions	Pay attention not to cause the influence on the environment by discharging into rivers. This product is water pollutant and should be prevented from contaminating soil or from entering sewage and drainage systems and bodies of water. After removal, flush contaminated area thoroughly with water.
Methods and Equipment for Containment and Cleaning up Prevention Measures for Secondary Accidents	Prevent flowing into drain, sewage, basement, and closed area. Remove thoroughly since the smooth and slippery surface will be formed on the floor.

Section 7 – HANDLING AND STORAGE

Handling	Technical Measures	Provide ventilation system and use necessary personal protective equipment as described in "Section 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION".
	Precautions for Safe Handling	Avoid breathing mist, vapours and spray. Wash hand thoroughly after handling. Do not contact, breathe or swallow. Do not eat, drink or smoke when using this product. Avoid contact with eyes. 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	Refer to "Section 10 – STABILITY AND REACTIVITY". 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	Use personal gloves as required.
	Eye Protection Skin and Body Protection	Use personal eye protection as required. 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 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 Lower Limit Limits	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 Sensitization	No data available
Skin Sensitization	No data available
Germ Cell Mutagenicity	No data available
Carcinogenicity	No data available
Reproductive Toxicity	No data available
Specific target organ toxicity (single exposure)	No data available
Specific target organ toxicity (repeated exposure)	No data available
Aspiration Hazard	No data available

Section 12 – ECOLOGICAL INFORMATION

Hazardous to the aquatic environment (acute)	No data available
Hazardous to the aquatic environment (long-term)	No data available
Hazardous to the ozone layer	No data available

Section 13 – DISPOSAL CONSIDERATIONS

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

Commission a waste disposal company, or a local public body who are licensed by local or regional government, to dispose of the material.
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.
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.

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	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	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 2019/01/31

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 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

LRN5-D、LR7、10-D、BL17、27、57、60、77、107、
 107FD、117W -D

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
 Specific target organ toxicity (single exposure) Category 1(blood,kidney,central nervous system)
 Specific target organ toxicity (single exposure) Category 3(respiratory tract irritation)
 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
 H335 May cause respiratory irritation
 H370 Causes damage to blood,kidney,central nervous system

Precautionary
 Statements
 Prevention
 Precautionary
 Statements

Avoid breathing gas.(P261)

Avoid breathing mist, vapours and spray.(P261)
 Avoid breathing dust and fume.(P261)
 Use only outdoors or in a well-ventilated area.(P271)
 Wear protective gloves.(P280)
 Wear eye protection and face protection.(P280)
 Do not breathe mist, vapours and spray.(P260)

Response Precautionary Statements	<p>Wash hand thoroughly after handling.(P264)</p> <p>Do not eat, drink or smoke when using this product.(P270)</p> <p>IF ON SKIN: Wash with plenty of soap and water.(P302+P352)</p> <p>IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.(P304+P340)</p> <p>Immediately call a doctor.(P310)</p> <p>Call a doctor if you feel unwell.(P312)</p> <p>If skin irritation occurs: Get medical advice and attention.(P332+P313)</p> <p>Take off contaminated clothing and wash it before reuse.(P362+P364)</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 exposed or concerned: Call a POISON CENTER/doctor/...(P308+P311)</p> <p>Specific treatment.(P321)</p>
Storage Precautionary Statements	<p>Store in a well-ventilated place keeping container tightly closed.(P403+P233)</p>
Disposal Precautionary Statements	<p>Store locked up.(P405)</p> <p>Dispose of contents and container in accordance with local, regional and national regulations (to be specified).(P501)</p>

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 2OH	(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
Thiodiethylene glycol	9.4%	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

Get medical advice and attention if you feel unwell.

Skin Contact
Eye Contact

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

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

Methods and Equipment
for Containment and
Cleaning up

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.

Prevention Measures for
Secondary Accidents

Prevent flowing into drain, sewage, basement, and closed area.

Remove thoroughly since the smooth and slippery surface will be formed on the floor.

Section 7 – HANDLING AND STORAGE

Handling

Technical Measures

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

Precautions for Safe
Handling

Wash hand thoroughly after handling.

Avoid swallowing.

Avoid contact with eyes.

Protect from high temperature and direct sunlight.

Prevents Handling of
Incompatible
Substances or
Mixtures

Refer to "Section 10 – STABILITY AND REACTIVITY".

Storage Precautionary
Statements

Conditions for Safe
Storage

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 Lower Limit Limits	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 Sensitization	No data available
Skin Sensitization	No data available
Germ Cell Mutagenicity	No data available
Carcinogenicity	No data available
Reproductive Toxicity	No data available
Specific target organ toxicity (single exposure)	No data available
Specific target organ toxicity (repeated exposure)	No data available
Aspiration Hazard	No data available

Section 12 – ECOLOGICAL INFORMATION

Hazardous to the aquatic environment (acute)	No data available
Hazardous to the aquatic environment (long-term)	No data available
Hazardous to the ozone layer	No data available

Section 13 – DISPOSAL CONSIDERATIONS**Residual Waste**

Disposal should be in accordance with applicable regulations and standards by the respective local governments.

Commission a waste disposal company, or a local public body who are licensed by local or regional government, to dispose of the material.

Contaminated Container and Packaging

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

Section 14 – TRANSPORT INFORMATION**International Regulations****Regulatory**

Not applicable

Information by Sea**Marine Pollutant**

Not applicable

Transport in bulk

Not applicable

according to**MARPOL****73/78,Annex II ,and****the IBC code****Regulatory**

Not applicable

Information by Air**Regulations in Japan****Regulatory**

Not applicable

Information by Road**or Rail****Regulatory**

Not applicable

Information by Sea**Marine Pollutant**

Not applicable

Transport in bulk

Not applicable

according to**MARPOL****73/78,Annex II ,and****the IBC code****Regulatory**

Not applicable

Information by Air**Emergency Response**

Not applicable

Guide Number**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 2016/07/21

Revision Date 2018/12/13

Section 1 – CHEMICALS AND COMPANY IDENTIFICATION

Chemical Identifier	WDR21-E
Product Code	WDR21E0001
Company Name	PENTEL CO., LTD.
Address	7-2,KOAMICHO,NIHONBASHI,CHUO-KU,TOKYO
Company Contact	QUALITY ASSURANCE DEPARTMENT I
Phone Number	03-5695-7210
Fax Number	03-5645-8204
Mail Address	hinpo@pentel.co.jp
Emergency Phone Number	03-5695-7210
Recommended Use and Restriction on Use	ink LR7-E, LRN5-E, BL77, 107-E, BLN105-E

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 2A Specific target organ toxicity (single exposure) Category 2(blood,kidney,central nervous system) Other hazards than mentioned above are Not applicable or Classification not possible.
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GHS Label Elements

Symbols



Signal Word	Warning
Hazard Statements	H315 Causes skin irritation H319 Causes serious eye irritation H332 Harmful if inhaled H371 May cause damage to blood,kidney,central nervous system
Precautionary Statements	
Prevention	Avoid breathing 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.(P270) Wear protective gloves.(P280) Wear eye protection and face protection.(P280)
Response	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.(P304+P340)
Precautionary Statements	

	Get medical advice and attention if you feel unwell.(P314)
	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 skin irritation occurs: Get medical advice and attention.(P332+P313)
Storage	Store locked up.(P405)
Precautionary Statements	
Disposal	Dispose of contents and container in accordance with local, regional and national regulations (to be specified).(P501)
Precautionary Statements	

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	11.5%	CH ₂ OHCH (OH)C H ₂ OH	(2)-242	Existing	56-81-5
Ethylene glycol	5%	HOCH ₂ CH 2OH	(2)-230	Existing	107-21-1
Thiodiethylene glycol	9%	HOCH ₂ CH 2SCH ₂ C H ₂ OH	(2)-470	Existing	111-48-8
Triethanolamine	0.69%	N(CH ₂ CH ₂ OH) ₃	(2)-308	Existing	102-71-6

Impurities and/or
Stabilizing Additives which
Contribute to the

No information available

Section 4 – FIRST AID MEASURES

Inhalation

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

Skin Contact

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

Eye Contact

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

Ingestion

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

Section 5 – FIRE FIGHTING MEASURES

Extinguishing Media

Dry chemicals, CO₂, water spray or regular foam.

Section 6 – ACCIDENTAL RELEASE MEASURES

Environmental Precautions		Pay attention not to cause the influence on the environment by discharging into rivers. This product is water pollutant and should be prevented from contaminating soil or from entering sewage and drainage systems and bodies of water. After removal, flush contaminated area thoroughly with water.
Methods and Equipment for Containment and Cleaning up		
Prevention Measures for Secondary Accidents		Prevent flowing into drain, sewage, basement, and closed area. Remove thoroughly since the smooth and slippery surface will be formed on the floor.

Section 7 – HANDLING AND STORAGE

Handling	Technical Measures	Provide ventilation system and use necessary personal protective equipment as described in "Section 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION".
	Precautions for Safe Handling	Avoid breathing mist, vapours and spray. Wash hand thoroughly after handling. Do not contact, breathe or swallow. Do not eat, drink or smoke when using this product. Avoid contact with eyes. 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	Refer to "Section 10 – STABILITY AND REACTIVITY". 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	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	Brown
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 Lower Limit Limits	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 Sensitization	No data available
Skin Sensitization	No data available
Germ Cell Mutagenicity	No data available
Carcinogenicity	No data available
Reproductive Toxicity	No data available
Specific target organ toxicity (single exposure)	No data available
Specific target organ toxicity (repeated exposure)	No data available
Aspiration Hazard	No data available

Section 12 – ECOLOGICAL INFORMATION

Hazardous to the aquatic environment (acute)	No data available
Hazardous to the aquatic environment (long-term)	No data available
Hazardous to the ozone layer	No data available

Section 13 – DISPOSAL CONSIDERATIONS

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

When commissioning the disposal to a disposal company, notify the danger and toxicity thoroughly to the company.

Commission a waste disposal company, or a local public body who are licensed by local or regional government, to dispose of the material.

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.

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.

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	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	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 2012/01/13

Revision Date 2018/12/13

Section 1 – CHEMICALS AND COMPANY IDENTIFICATION

Chemical Identifier	WDR21-F
Product Code	WDR21F0001
Company Name	PENTEL CO., LTD.
Address	7-2,KOAMICHO,NIHONBASHI,CHUO-KU,TOKYO
Company Contact	QUALITY ASSURANCE DEPARTMENT I
Phone Number	03-5695-7210
Fax Number	03-5645-8204
Mail Address	hinpo@pentel.co.jp
Emergency Phone Number	03-5695-7210
Recommended Use and Restriction on Use	ink LRN5,5TL-F, LR7-F, BLN75TL, 105-F, BL77, 107, 107FF-F

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 2A Specific target organ toxicity (single exposure) Category 2(blood,kidney,central nervous system) Other hazards than mentioned above are Not applicable or Classification not possible.
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GHS Label Elements

Symbols



Signal Word	Warning
Hazard Statements	H315 Causes skin irritation H319 Causes serious eye irritation H332 Harmful if inhaled H371 May cause damage to blood,kidney,central nervous system
Precautionary Statements	
Prevention	Avoid breathing 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.(P270) Wear protective gloves.(P280) Wear eye protection and face protection.(P280)
Response	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.(P304+P340)
Precautionary Statements	

	Get medical advice and attention if you feel unwell.(P314)
	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 skin irritation or rash occurs, get medical advice and attention.(P333+P313)
Storage	Store locked up.(P405)
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	11.5%	CH ₂ OHCH (OH)C H ₂ OH	(2)-242	Existing	56-81-5
Ethylene glycol	5%	HOCH ₂ CH 2OH	(2)-230	Existing	107-21-1
Thiodiethylene glycol	9%	HOCH ₂ CH 2SCH ₂ C H ₂ OH	(2)-470	Existing	111-48-8
Triethanolamine	0.63%	N(CH ₂ CH ₂ OH) ₃	(2)-308	Existing	102-71-6

Impurities and/or
Stabilizing Additives which
Contribute to the

No information available

Section 4 – FIRST AID MEASURES

Inhalation

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

Skin Contact

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

Eye Contact

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

Ingestion

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

Section 5 – FIRE FIGHTING MEASURES

Extinguishing Media

Dry chemicals, CO₂, water spray or regular foam.

Section 6 – ACCIDENTAL RELEASE MEASURES

Environmental Precautions		Pay attention not to cause the influence on the environment by discharging into rivers. This product is water pollutant and should be prevented from contaminating soil or from entering sewage and drainage systems and bodies of water. After removal, flush contaminated area thoroughly with water.
Methods and Equipment for Containment and Cleaning up		
Prevention Measures for Secondary Accidents		Prevent flowing into drain, sewage, basement, and closed area. Remove thoroughly since the smooth and slippery surface will be formed on the floor.

Section 7 – HANDLING AND STORAGE

Handling	Technical Measures	Provide ventilation system and use necessary personal protective equipment as described in "Section 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION".
	Precautions for Safe Handling	Avoid breathing mist, vapours and spray. Wash hand thoroughly after handling. Do not contact, breathe or swallow. Do not eat, drink or smoke when using this product. Avoid contact with eyes. 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	Refer to "Section 10 – STABILITY AND REACTIVITY". 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	Use personal gloves as required.
	Eye Protection	Use personal eye protection as required.
	Skin and Body Protection	Use personal face protection as required.

Section 9 – PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Physical State	liquid
	Form	liquid (viscous liquid)
	Colour	Orange
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 Lower Limit Limits	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 Sensitization	No data available
Skin Sensitization	No data available
Germ Cell Mutagenicity	No data available
Carcinogenicity	No data available
Reproductive Toxicity	No data available
Specific target organ toxicity (single exposure)	No data available
Specific target organ toxicity (repeated exposure)	No data available
Aspiration Hazard	No data available

Section 12 – ECOLOGICAL INFORMATION

Hazardous to the aquatic environment (acute)	No data available
Hazardous to the aquatic environment (long-term)	No data available
Hazardous to the ozone layer	No data available

Section 13 – DISPOSAL CONSIDERATIONS

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

Commission a waste disposal company, or a local public body who are licensed by local or regional government, to dispose of the material.
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.
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.

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	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	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 2016/07/21

Revision Date 2019/02/07

Section 1 – CHEMICALS AND COMPANY IDENTIFICATION

Chemical Identifier	WDR21-K
Product Code	WDR21K0001
Company Name	PENTEL CO., LTD.
Address	7-2,KOAMICHO,NIHONBASHI,CHUO-KU,TOKYO
Company Contact	QUALITY ASSURANCE DEPARTMENT I
Phone Number	03-5695-7210
Fax Number	03-5645-8204
Mail Address	hinpo@pentel.co.jp
Emergency Phone Number	03-5695-7210
Recommended Use and Restriction on Use	ink LR7-K, LRN5-K, BL77, 107-K, BLN105-K

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 2A Specific target organ toxicity (single exposure) Category 2(blood,kidney,central nervous system) Other hazards than mentioned above are Not applicable or Classification not possible.
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GHS Label Elements

Symbols



Signal Word	Warning
Hazard Statements	H315 Causes skin irritation H319 Causes serious eye irritation H332 Harmful if inhaled H371 May cause damage to blood,kidney,central nervous system
Precautionary Statements	
Prevention	Avoid breathing 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.(P270) Wear protective gloves.(P280) Wear eye protection and face protection.(P280)
Response	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.(P304+P340)
Precautionary Statements	

	Get medical advice and attention if you feel unwell.(P314)
	If skin irritation occurs: Get medical advice and attention.(P332+P313)
	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)
Storage	Store locked up.(P405)
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	11.5%	CH ₂ OHCH (OH)C H ₂ OH	(2)-242	Existing	56-81-5
Ethylene glycol	5%	HOCH ₂ CH 2OH	(2)-230	Existing	107-21-1
Thiodiethylene glycol	9%	HOCH ₂ CH 2SCH ₂ C H ₂ OH	(2)-470	Existing	111-48-8
Triethanolamine	0.64%	N(CH ₂ CH ₂ OH) ₃	(2)-308	Existing	102-71-6

Impurities and/or
Stabilizing Additives which
Contribute to the

No information available

Section 4 – FIRST AID MEASURES

Inhalation

Get medical advice and attention if you feel unwell.

Skin Contact
Eye Contact

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.
Get medical advice and attention if you feel unwell.

Ingestion

Section 5 – FIRE FIGHTING MEASURES

Extinguishing Media

Dry chemicals, CO₂, water spray or regular foam.

Section 6 – ACCIDENTAL RELEASE MEASURES

Environmental
Precautions

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

Methods and Equipment
for Containment and
Cleaning up

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

Absorb spill with inert material (e.g., dry sand or
earth), then place in a chemical waste container.
After removal, flush contaminated area thoroughly
with water.

Prevention Measures for
Secondary Accidents

Prevent flowing into drain, sewage, basement, and
closed area.

Remove thoroughly since the smooth and slippery
surface will be formed on the floor.

Section 7 – HANDLING AND STORAGE

Handling

Technical Measures

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

Precautions for Safe
Handling

Wash hand thoroughly after handling.

Avoid swallowing.

Avoid contact with eyes.

Protect from high temperature and direct sunlight.

Prevents Handling of
Incompatible
Substances or
Mixtures

Refer to "Section 10 – STABILITY AND
REACTIVITY".

Storage Precautionary
Statements

Conditions for Safe
Storage

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

Use personal respiratory equipment as required.

Protection

Hand Protection

Use personal gloves as required.

Eye Protection

Use personal eye protection as required.

Skin and Body

Use personal protective clothing and face

Protection

protection as required.

Section 9 – PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical State

liquid

Form

liquid (viscous liquid)

Colour

Lime Green

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 Sensitization	No data available
Skin Sensitization	No data available
Germ Cell Mutagenicity	No data available
Carcinogenicity	No data available
Reproductive Toxicity	No data available
Specific target organ toxicity (single exposure)	No data available
Specific target organ toxicity (repeated exposure)	No data available
Aspiration Hazard	No data available

Section 12 – ECOLOGICAL INFORMATION

Hazardous to the aquatic environment (acute)	No data available
Hazardous to the aquatic environment (long-term)	No data available
Hazardous to the ozone layer	No data available

Section 13 – DISPOSAL CONSIDERATIONS

Residual Waste	Disposal should be in accordance with applicable regulations and standards by the respective local governments. Commission a waste disposal company, or a local public body who are licensed by local or regional government, to dispose of the material.
Contaminated Container and Packaging	Recycle containers after cleansing, or carry out the disposal under the related laws and regulations and the standards of the local governments.

Section 14 – TRANSPORT INFORMATION

International Regulations	Regulatory Information by Sea	Not applicable
	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
	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 2012/01/13

Revision Date 2019/02/07

Section 1 – CHEMICALS AND COMPANY IDENTIFICATION

Chemical Identifier	WDR21-P
Product Code	WDR21P0001
Company Name	PENTEL CO., LTD.
Address	7-2,KOAMICHO,NIHONBASHI,CHUO-KU,TOKYO
Company Contact	QUALITY ASSURANCE DEPARTMENT I
Phone Number	03-5695-7210
Fax Number	03-5645-8204
Mail Address	hinpo@pentel.co.jp
Emergency Phone Number	03-5695-7210
Recommended Use and Restriction on Use	ink LR7-P, LRN5-P, BL77, 77PW, 107-P, 107FP-P, BLN105-P

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 2A Specific target organ toxicity (single exposure) Category 2(blood,kidney,central nervous system) Other hazards than mentioned above are Not applicable or Classification not possible.
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GHS Label Elements

Symbols



Signal Word	Warning
Hazard Statements	H315 Causes skin irritation H319 Causes serious eye irritation H332 Harmful if inhaled H371 May cause damage to blood,kidney,central nervous system
Precautionary Statements	
Prevention	Avoid breathing 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.(P270) Wear protective gloves.(P280) Wear eye protection and face protection.(P280)
Response	IF INHALED: Remove to fresh air and keep at rest
Precautionary Statements	in a position comfortable for breathing.(P304+P340)

	Get medical advice and attention if you feel unwell.(P314)
	If skin irritation or rash occurs, get medical advice and attention.(P333+P313)
	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)
Storage	Store locked up.(P405)
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	11.5%	CH ₂ OHCH (OH)C H ₂ OH	(2)-242	Existing	56-81-5
Ethylene glycol	5%	HOCH ₂ CH 2OH	(2)-230	Existing	107-21-1
Thiodiethylene glycol	9%	HOCH ₂ CH 2SCH ₂ C H ₂ OH	(2)-470	Existing	111-48-8
Triethanolamine	0.64%	N(CH ₂ CH ₂ OH) ₃	(2)-308	Existing	102-71-6

Impurities and/or
Stabilizing Additives which
Contribute to the

No information available

Section 4 – FIRST AID MEASURES

Inhalation

Get medical advice and attention if you feel unwell.

Skin Contact
Eye Contact

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.
Get medical advice and attention if you feel unwell.

Ingestion

Section 5 – FIRE FIGHTING MEASURES

Extinguishing Media

Dry chemicals, CO₂, water spray or regular foam.

Section 6 – ACCIDENTAL RELEASE MEASURES

Environmental
Precautions

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

Methods and Equipment
for Containment and
Cleaning up

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

Absorb spill with inert material (e.g., dry sand or
earth), then place in a chemical waste container.
After removal, flush contaminated area thoroughly
with water.

Prevention Measures for
Secondary Accidents

Prevent flowing into drain, sewage, basement, and
closed area.

Remove thoroughly since the smooth and slippery
surface will be formed on the floor.

Section 7 – HANDLING AND STORAGE

Handling

Technical Measures

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

Precautions for Safe
Handling

Wash hand thoroughly after handling.

Avoid swallowing.

Avoid contact with eyes.

Protect from high temperature and direct sunlight.

Prevents Handling of
Incompatible
Substances or
Mixtures

Refer to "Section 10 – STABILITY AND
REACTIVITY".

Storage Precautionary
Statements

Conditions for Safe
Storage

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

Use personal respiratory equipment as required.

Protection

Hand Protection

Use personal gloves as required.

Eye Protection

Use personal eye protection as required.

Skin and Body

Use personal protective clothing and face

Protection

protection as required.

Section 9 – PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Physical State

liquid

Form

liquid (viscous liquid)

Colour

Pink

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	No data available
Temperature	
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 Sensitization	No data available
Skin Sensitization	No data available
Germ Cell Mutagenicity	No data available
Carcinogenicity	No data available
Reproductive Toxicity	No data available
Specific target organ toxicity (single exposure)	No data available
Specific target organ toxicity (repeated exposure)	No data available
Aspiration Hazard	No data available

Section 12 – ECOLOGICAL INFORMATION

Hazardous to the aquatic environment (acute)	No data available
Hazardous to the aquatic environment (long-term)	No data available
Hazardous to the ozone layer	No data available

Section 13 – DISPOSAL CONSIDERATIONS

Residual Waste	Disposal should be in accordance with applicable regulations and standards by the respective local governments. Commission a waste disposal company, or a local public body who are licensed by local or regional government, to dispose of the material.
Contaminated Container and Packaging	Recycle containers after cleansing, or carry out the disposal under the related laws and regulations and the standards of the local governments.

Section 14 – TRANSPORT INFORMATION

International Regulations	Regulatory Information by Sea	Not applicable
	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	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 2012/01/13

Revision Date 2019/02/07

Section 1 – CHEMICALS AND COMPANY IDENTIFICATION

Chemical Identifier WDR21-S
 Product Code WDR21S0001
 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
 LR7-S, LRN5-S, BL77, 107-S, BL107FS-S,
 BLN105-S

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 2A
 Specific target organ toxicity (single exposure) Category 2(blood,kidney,central nervous system)
 Other hazards than mentioned above are Not applicable or Classification not possible.

GHS Label Elements

Symbols



Signal Word

Warning

Hazard Statements

H315 Causes skin irritation
 H319 Causes serious eye irritation
 H332 Harmful if inhaled
 H371 May cause damage to blood,kidney,central nervous system

Precautionary Statements

Avoid breathing mist, vapours and spray.(P261)

Prevention

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)
 Wear protective gloves.(P280)
 Wear eye protection and face protection.(P280)
 IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.(P304+P340)

Response

Precautionary Statements

	Get medical advice and attention if you feel unwell.(P314)
	If skin irritation or rash occurs, get medical advice and attention.(P333+P313)
	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)
Storage	Store locked up.(P405)
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	11.5%	CH ₂ OHCH (OH)C H ₂ OH	(2)-242	Existing	56-81-5
Ethylene glycol	5%	HOCH ₂ CH 2OH	(2)-230	Existing	107-21-1
Thiodiglycol	9%	HOCH ₂ CH 2SCH ₂ C H ₂ OH	(2)-470	Existing	111-48-8
Triethanolamine	0.64%	N(CH ₂ CH ₂ OH) ₃	(2)-308	Existing	102-71-6

Impurities and/or
Stabilizing Additives which
Contribute to the

No information available

Section 4 – FIRST AID MEASURES

Inhalation

Get medical advice and attention if you feel unwell.

Skin Contact
Eye Contact

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.
Get medical advice and attention if you feel unwell.

Ingestion

Section 5 – FIRE FIGHTING MEASURES

Extinguishing Media

Dry chemicals, CO₂, water spray or regular foam.

Section 6 – ACCIDENTAL RELEASE MEASURES

Environmental
Precautions

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

Methods and Equipment for Containment and Cleaning up	Vacuum or sweep up material and place in a disposal container.
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.
	Prevents Handling of Incompatible Substances or Mixtures	Refer to "Section 10 – STABILITY AND REACTIVITY".
Storage Precautionary Statements	Conditions for Safe Storage	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	sky blue
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 Sensitization	No data available
Skin Sensitization	No data available
Germ Cell Mutagenicity	No data available
Carcinogenicity	No data available
Reproductive Toxicity	No data available
Specific target organ toxicity (single exposure)	No data available
Specific target organ toxicity (repeated exposure)	No data available
Aspiration Hazard	No data available

Section 12 – ECOLOGICAL INFORMATION

Hazardous to the aquatic environment (acute)	No data available
Hazardous to the aquatic environment (long-term)	No data available
Hazardous to the ozone layer	No data available

Section 13 – DISPOSAL CONSIDERATIONS

Residual Waste	Disposal should be in accordance with applicable regulations and standards by the respective local governments. Commission a waste disposal company, or a local public body who are licensed by local or regional government, to dispose of the material.
Contaminated Container and Packaging	Recycle containers after cleansing, or carry out the disposal under the related laws and regulations and the standards of the local governments.

Section 14 – TRANSPORT INFORMATION

International Regulations	Regulatory Information by Sea	Not applicable
	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	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 2016/07/21

Revision Date 2018/12/13

Section 1 – CHEMICALS AND COMPANY IDENTIFICATION

Chemical Identifier	WDR21-S3
Product Code	WDR21S3001
Company Name	PENTEL CO., LTD.
Address	7-2,KOAMICHO,NIHONBASHI,CHUO-KU,TOKYO
Company Contact	QUALITY ASSURANCE DEPARTMENT I
Phone Number	03-5695-7210
Fax Number	03-5645-8204
Mail Address	hinpo@pentel.co.jp
Emergency Phone Number	03-5695-7210
Recommended Use and Restriction on Use	ink LRN5, 5TL-S3, LR7-S3, BLN75TL, 105-S3, BL77, 107-S3

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 2A Specific target organ toxicity (single exposure) Category 2(blood,kidney,central nervous system) Other hazards than mentioned above are Not applicable or Classification not possible.
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GHS Label Elements

Symbols



Signal Word	Warning
Hazard Statements	H315 Causes skin irritation H319 Causes serious eye irritation H332 Harmful if inhaled H371 May cause damage to blood,kidney,central nervous system
Precautionary Statements	
Prevention	Avoid breathing 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.(P270) Wear protective gloves.(P280) Wear eye protection and face protection.(P280)
Response	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.(P304+P340)
Precautionary Statements	

	Get medical advice and attention if you feel unwell.(P314)
	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 skin irritation or rash occurs, get medical advice and attention.(P333+P313)
Storage	Store locked up.(P405)
Precautionary Statements	
Disposal	Dispose of contents and container in accordance with local, regional and national regulations (to be specified).(P501)
Precautionary Statements	

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	11.5%	CH ₂ OHCH (OH)C H ₂ OH	(2)-242	Existing	56-81-5
Ethylene glycol	5%	HOCH ₂ CH 2OH	(2)-230	Existing	107-21-1
Thiodiethylene glycol	9%	HOCH ₂ CH 2SCH ₂ C H ₂ OH	(2)-470	Existing	111-48-8
Triethanolamine	0.64%	N(CH ₂ CH ₂ OH) ₃	(2)-308	Existing	102-71-6

Impurities and/or
Stabilizing Additives which
Contribute to the

No information available

Section 4 – FIRST AID MEASURES

Inhalation

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

Skin Contact

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

Eye Contact

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

Ingestion

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

Section 5 – FIRE FIGHTING MEASURES

Extinguishing Media

Dry chemicals, CO₂, water spray or regular foam.

Section 6 – ACCIDENTAL RELEASE MEASURES

Environmental Precautions		Pay attention not to cause the influence on the environment by discharging into rivers. This product is water pollutant and should be prevented from contaminating soil or from entering sewage and drainage systems and bodies of water. After removal, flush contaminated area thoroughly with water.
Methods and Equipment for Containment and Cleaning up		
Prevention Measures for Secondary Accidents		Prevent flowing into drain, sewage, basement, and closed area. Remove thoroughly since the smooth and slippery surface will be formed on the floor.

Section 7 – HANDLING AND STORAGE

Handling	Technical Measures	Provide ventilation system and use necessary personal protective equipment as described in "Section 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION".
	Precautions for Safe Handling	Avoid breathing mist, vapours and spray. Wash hand thoroughly after handling. Do not contact, breathe or swallow. Do not eat, drink or smoke when using this product. Avoid contact with eyes. 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	Refer to "Section 10 – STABILITY AND REACTIVITY". 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	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	turquoise blue
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 Lower Limit Limits	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 Sensitization	No data available
Skin Sensitization	No data available
Germ Cell Mutagenicity	No data available
Carcinogenicity	No data available
Reproductive Toxicity	No data available
Specific target organ toxicity (single exposure)	No data available
Specific target organ toxicity (repeated exposure)	No data available
Aspiration Hazard	No data available

Section 12 – ECOLOGICAL INFORMATION

Hazardous to the aquatic environment (acute)	No data available
Hazardous to the aquatic environment (long-term)	No data available
Hazardous to the ozone layer	No data available

Section 13 – DISPOSAL CONSIDERATIONS

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

Commission a waste disposal company, or a local public body who are licensed by local or regional government, to dispose of the material.
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.
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.

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	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	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 2019/01/31

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 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

LR7-V、LRN5-V、BL17, 27, 57, 77, 77PW, 107,
 107FV, 117W, 407V-V、BLN15, 75, 105-V

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
 Specific target organ toxicity (single exposure) Category 1(blood,kidney,central nervous system)
 Specific target organ toxicity (single exposure) Category 3(respiratory tract irritation)
 Other hazards than mentioned above are Not applicable or Classification not possible.

GHS Label Elements

Symbols



Signal Word

Hazard Statements

Danger
 H315 Causes skin irritation
 H318 Causes serious eye damage
 H332 Harmful if inhaled
 H335 May cause respiratory irritation
 H370 Causes damage to blood,kidney,central nervous system

Precautionary Statements

Prevention

Precautionary Statements

Avoid breathing gas.(P261)

Avoid breathing mist, vapours and spray.(P261)

Avoid breathing dust and fume.(P261)

Use only outdoors or in a well-ventilated area.(P271)

Wear protective gloves.(P280)

Wear eye protection and face protection.(P280)

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

Response Precautionary Statements	<p>Wash hand thoroughly after handling.(P264)</p> <p>Do not eat, drink or smoke when using this product.(P270)</p> <p>IF ON SKIN: Wash with plenty of soap and water.(P302+P352)</p> <p>IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.(P304+P340)</p> <p>Immediately call a doctor.(P310)</p> <p>Call a doctor if you feel unwell.(P312)</p> <p>If skin irritation occurs: Get medical advice and attention.(P332+P313)</p> <p>Take off contaminated clothing and wash it before reuse.(P362+P364)</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 exposed or concerned: Call a POISON CENTER/doctor/...(P308+P311)</p> <p>Specific treatment.(P321)</p>
Storage Precautionary Statements	<p>Store in a well-ventilated place keeping container tightly closed.(P403+P233)</p>
Disposal Precautionary Statements	<p>Store locked up.(P405)</p> <p>Dispose of contents and container in accordance with local, regional and national regulations (to be specified).(P501)</p>

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)CH ₂ OH	(2)-242,(7)-338	Existing	56-81-5
Thiodiethylene glycol	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

Get medical advice and attention if you feel unwell.

Skin Contact
Eye Contact

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

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

Methods and Equipment
for Containment and
Cleaning up

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.

Prevention Measures for
Secondary Accidents

Prevent flowing into drain, sewage, basement, and closed area.

Remove thoroughly since the smooth and slippery surface will be formed on the floor.

Section 7 – HANDLING AND STORAGE

Handling

Technical Measures

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

Precautions for Safe
Handling

Wash hand thoroughly after handling.

Avoid swallowing.

Avoid contact with eyes.

Protect from high temperature and direct sunlight.

Prevents Handling of
Incompatible
Substances or
Mixtures

Refer to "Section 10 – STABILITY AND REACTIVITY".

Storage Precautionary
Statements

Conditions for Safe
Storage

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 Lower Limit Limits	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 Sensitization	No data available
Skin Sensitization	No data available
Germ Cell Mutagenicity	No data available
Carcinogenicity	No data available
Reproductive Toxicity	No data available
Specific target organ toxicity (single exposure)	No data available
Specific target organ toxicity (repeated exposure)	No data available
Aspiration Hazard	No data available

Section 12 – ECOLOGICAL INFORMATION

Hazardous to the aquatic environment (acute)	No data available
Hazardous to the aquatic environment (long-term)	No data available
Hazardous to the ozone layer	No data available

Section 13 – DISPOSAL CONSIDERATIONS**Residual Waste**

Disposal should be in accordance with applicable regulations and standards by the respective local governments.

Commission a waste disposal company, or a local public body who are licensed by local or regional government, to dispose of the material.

Contaminated Container and Packaging

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

Section 14 – TRANSPORT INFORMATION**International Regulations**

Regulatory
Information by Sea
Marine Pollutant
Transport in bulk
according to
MARPOL

Not applicable

73/78,Annex II ,and
the IBC code

Regulatory

Not applicable

Information by Air

Regulations in Japan

Regulatory

Not applicable

Information by Road
or Rail

Regulatory

Not applicable

Information by Sea
Marine Pollutant
Transport in bulk
according to
MARPOL

Not applicable

Not applicable

73/78,Annex II ,and
the IBC code

Regulatory

Not applicable

Information by Air

**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

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