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

Section 1 - CHEMICALS AND COMPANY IDENTIFICATION

Chemical IdentifieWDR11-A Product Code WDR11A0001 Company Name PENTEL CO., LTD.

Address 7-2. KOAMICHO, NIHONBASHI, CHUO-KU, TOKYO

QUALITY ASSURANCE DEPARTMENT I Company Contact

048-928-6668 Phone Number Fax Number 048-928-9190 Mail Address hinpo@pentel.co.jp 048-928-6668

Emergency Phone

Number

Recommended Use ink and Restriction on

Use

LRN5/7, LRN5H, LRNT5, LR7/10, BLN15/23/25/75/ 105, BL17/27/30/57/77/107, BL60, BL80, BL110-A

Section 2 - HAZARDS IDENTIFICATION GHS Classification

> Health Hazards Serious eve damage/eve irritation Category

> > Specific target organ toxicity (single expo

Category 2(respiratory

apparatus, heart, kidney, central nervous syst Specific target organ toxicity (repeated ex Category 2(respiratory apparatus, heart, cent

nervous system)

Environmental Hazards

Hazard to the aquatic environment (acute ha

Category 2

Hazard to the aquatic environment (long-ter

hazard) Category 2

Other hazards than mentioned above are Not

applicable or No data available.

GHS Label Elements

Symbols



Signal Word Warning

Hazard Statements H320 Causes eye irritation

H371 May cause damage to respiratory

apparatus, heart, kidney, central nervous syst

H373 May cause damage to respiratory

apparatus, heart, central nervous system thro

prolonged or repeated exposure

H411 Toxic to aquatic life with long lastin

Precautionary Statements Prevention Precautionary Statements

Do not get in eyes, on skin, or on clothing

Response Precautionary Statements IF exposed or concerned: Call a POISON CENTER/doctor/...(P308+P311)

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue

rinsing.(P305+P351+P338)

If eye irritation persists: Get medical advice and

attention.(P337+P313)

IF SWALLOWED: Rinse mouth. Do NOT induce

vomiting.(P301+P330+P331)

IF ON SKIN: Gently wash with plenty of soap and

water.(P302+P350) Store locked up.(P405)

Storage Precautionary Statements

Disposal Dispose of contents and container in accordance Precautionary with local, regional and national regulations (to be

Statements specified).(P501)

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

Distinction of Substance

mixture

or Mixture

or wixture					
Chemical Name or	Concentration or Its	Formula	ENCS No.	/ISHL No.	CAS RN
Generic Name	Ranges	Formula	ENCS No.	ISHL No.	UAS KIN
Glycerin	8.79%	CH2OHCH	(2)-	Existing	56-81-5
		(OH)C	242,(7)-		
		H2OH	338		
Ethylene glycol	7%	HOCH2CH	(2)-230	Existing	107-21-1
		20H			
Ammonia	0.3%		(1)-391	Existing	7664-41-7
Triethanolamine	0.3%	N(CH2CH2	(2)-308	Existing	102-71-6
		OH)3			
Thiodiglycol	9.5%	HOCH2CH	(2)-470	Existing	111-48-8
		2SCH2C			
		H2OH			

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

Section 4 - FIRST AID MEASURES

Inhalation Remove person to fresh air and keep comfortable

for breathing.

Get medical advice and attention if you feel unwell.

Skin Contact Immediately rinse skin with water.

Get medical advice and attention if you feel unwell.

Wash with plenty of soap and water.

If skin irritation or rash occurs, get medical advice

and attention.

Eye Contact Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do.

Continue rinsing.

When the ocular stimulation lasts, Seek medical

treatment and advice.

Ingestion Rinse mouth. Do NOT induce vomiting.

Get medical advice and attention if you feel unwell.

Section 5 - FIRE FIGHTING MEASURES

Extinguishing Media Dry chemicals, CO2, water spray or regular foam.

Section 6 - ACCIDENTAL RELEASE MEASURES

Environmental Pay attention not to cause the influence on the

Precautions 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

Methods and Equipment with water.

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

Secondary Accidents closed area.

Remove thoroughly since the smooth and slippery

surface will be formed on the floor.

Section 7 - HANDLING AND STORAGE

Prevention Measures for

Handling Technical Measures Provide ventilation system and use necessary

personal protective equipment as described in

Section 8 - EXPOSURE CONTROLS /

PERSONAL PROTECTION".

Precautions for Safe Wash hand thoroughly after handling.

Handling

Avoid swallowing.

Protect from high temperature and direct sunlight.

Prevents Handling of Refer to "Section 10 - STABILITY AND

REACTIVITY". Imcompatible

Substances or Mixtures

Specific Hygine

Measures

Wash hand thoroughly after handling.

Storage Precautionary

Statements

Technical Measures The storage facility should be provided with

necessary lighting, lighting equipment, and ventilator to store and handle dangerous goods.

Refer to "Section 10 - STABILITY AND

REACTIVITY".

Have containers keep away from direct sunlight

and heat.

Keep away from heat. Store locked up.

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

containers.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls Good general ventilation should be sufficient to

control airborne levels.

Personal Protective

Equipment

Eye Protection

Wear eye protection.

Protection glasses (ordinary glasses, ordinary

glasses with side shields, and goggles).

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance Physical State liquid

Form liquid (viscous liquid)

Colour black

Odour slight odor

Odour threshold

pH

No data available

No data available

Melting Point/Freezing

No data available

welling Foirit/ Freezing

Point

Initial Boiling Point and No data available

Boiling Ranges

Flash Point no data available
Evaporation Rate No data available
Flammability (solid, gas) No data available
Flammability or Explosive Lower Limit No data available

Limits

Upper Limit No data available

Vapour Pressure

Vapour Density

No data available

Specific Gravity (Density)

No data available

Partition Coefficient: n
No data available

Octanol/Water

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

Chemical stability

Possibility of Hazardous

No data available

No data available

Reaction

Conditions to Avoid No data available Imcompatible Substances No data available

or Mixtures

Hazardous Decomposition No data available

Products

Section 11 - TOXICOLOGICAL INFORMATION

Acute Toxicity

No information available

Skin Corrosion/Irritation No data available
Serious eye damage/eye No data available

irritation

Respiratory or Skin No data available

Sensitization

Germ Cell Mutagenicity

Carcinogenicity

Reproductive Toxicity

Specific target organ

No data available

No data available

No data available

toxicity (single exposure)

Specific target organ No data available

toxicity (repeated

exposure)

Aspiration Hazard No data available

Section 12 - ECOLOGICAL INFORMATION

Hazard to the aquatic environment (acute

Hazard to the aquatic environment (long-term

hazard)

Hazard to the ozone layer

No data available

No data available

No data available

Not applicable

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.

Recycle containers after cleansing, or carry out the disposal under the related laws and regulations

and the standards of the local governments.

Contaminated Container and Packaging

Section 14 - TRANSPORT INFORMATION

International Regulations Regulatory

Information by Sea

Marine Pollutant Not applicable Transport in bulk Not applicable

according to **MARPOL**

73/78, Annex II, and the IBC code

Not applicable Regulatory

Information by Air

Regulations in Japan Regulatory Not applicable

Information by Road

or Rail

Regulatory

Information by Sea

Marine Pollutant Transport in bulk

according to **MARPOL**

73/78.Annex II.and the IBC code

Regulatory

Information by Air

Not applicable

Not applicable

Not applicable

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.

Response Precautionary Statements IF exposed or concerned: Call a POISON CENTER/doctor/...(P308+P311)

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue

rinsing.(P305+P351+P338)

If eye irritation persists: Get medical advice and

attention.(P337+P313)

IF SWALLOWED: Rinse mouth. Do NOT induce

vomiting.(P301+P330+P331)

IF ON SKIN: Gently wash with plenty of soap and

water.(P302+P350) Store locked up.(P405)

Storage Precautionary Statements

Disposal Dispose of contents and container in accordance Precautionary with local, regional and national regulations (to be

Statements specified).(P501)

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

Distinction of Substance

mixture

or Mixture

or wixture					
Chemical Name or	Concentration or Its	Formula	ENCS No.	/ISHL No.	CAS RN
Generic Name	Ranges	Formula	ENCS No.	ISHL No.	UAS KIN
Glycerin	8.79%	CH2OHCH	(2)-	Existing	56-81-5
		(OH)C	242,(7)-		
		H2OH	338		
Ethylene glycol	7%	HOCH2CH	(2)-230	Existing	107-21-1
		20H			
Ammonia	0.3%		(1)-391	Existing	7664-41-7
Triethanolamine	0.3%	N(CH2CH2	(2)-308	Existing	102-71-6
		OH)3			
Thiodiglycol	9.5%	HOCH2CH	(2)-470	Existing	111-48-8
		2SCH2C			
		H2OH			

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

Section 4 - FIRST AID MEASURES

Inhalation Remove person to fresh air and keep comfortable

for breathing.

Get medical advice and attention if you feel unwell.

Skin Contact Immediately rinse skin with water.

Get medical advice and attention if you feel unwell.

Wash with plenty of soap and water.

If skin irritation or rash occurs, get medical advice

and attention.

Eye Contact Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do.

Continue rinsing.

When the ocular stimulation lasts, Seek medical

treatment and advice.

Ingestion Rinse mouth. Do NOT induce vomiting.

Get medical advice and attention if you feel unwell.

Section 5 - FIRE FIGHTING MEASURES

Extinguishing Media Dry chemicals, CO2, water spray or regular foam.

Section 6 - ACCIDENTAL RELEASE MEASURES

Environmental Pay attention not to cause the influence on the

Precautions 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

Methods and Equipment with water.

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

Secondary Accidents closed area.

Remove thoroughly since the smooth and slippery

surface will be formed on the floor.

Section 7 - HANDLING AND STORAGE

Prevention Measures for

Handling Technical Measures Provide ventilation system and use necessary

personal protective equipment as described in

Section 8 - EXPOSURE CONTROLS /

PERSONAL PROTECTION".

Precautions for Safe Wash hand thoroughly after handling.

Handling

Avoid swallowing.

Protect from high temperature and direct sunlight.

Prevents Handling of Refer to "Section 10 - STABILITY AND

REACTIVITY". Imcompatible

Substances or Mixtures

Specific Hygine

Measures

Wash hand thoroughly after handling.

Storage Precautionary

Statements

Technical Measures The storage facility should be provided with

necessary lighting, lighting equipment, and ventilator to store and handle dangerous goods.

Refer to "Section 10 - STABILITY AND

REACTIVITY".

Have containers keep away from direct sunlight

and heat.

Keep away from heat. Store locked up.

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

containers.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls Good general ventilation should be sufficient to

control airborne levels.

Personal Protective

Equipment

Eye Protection

Wear eye protection.

Protection glasses (ordinary glasses, ordinary

glasses with side shields, and goggles).

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance Physical State liquid

Form liquid (viscous liquid)

Colour black

Odour slight odor

Odour threshold

pH

No data available

No data available

Melting Point/Freezing

No data available

welling Foirit/ Freezing

Point

Initial Boiling Point and No data available

Boiling Ranges

Flash Point no data available
Evaporation Rate No data available
Flammability (solid, gas) No data available
Flammability or Explosive Lower Limit No data available

Limits

Upper Limit No data available

Vapour Pressure

Vapour Density

No data available

Specific Gravity (Density)

No data available

Partition Coefficient: n
No data available

Octanol/Water

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

Chemical stability

Possibility of Hazardous

No data available

No data available

Reaction

Conditions to Avoid No data available Imcompatible Substances No data available

or Mixtures

Hazardous Decomposition No data available

Products

Section 11 - TOXICOLOGICAL INFORMATION

Acute Toxicity

No information available

Skin Corrosion/Irritation No data available
Serious eye damage/eye No data available

irritation

Respiratory or Skin No data available

Sensitization

Germ Cell Mutagenicity

Carcinogenicity

Reproductive Toxicity

Specific target organ

No data available

No data available

No data available

toxicity (single exposure)

Specific target organ No data available

toxicity (repeated

exposure)

Aspiration Hazard No data available

Section 12 - ECOLOGICAL INFORMATION

Hazard to the aquatic environment (acute

Hazard to the aquatic environment (long-term

hazard)

Hazard to the ozone layer

No data available

No data available

No data available

Not applicable

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.

Recycle containers after cleansing, or carry out the disposal under the related laws and regulations

and the standards of the local governments.

Contaminated Container and Packaging

Section 14 - TRANSPORT INFORMATION

International Regulations Regulatory

Information by Sea

Marine Pollutant Not applicable Transport in bulk Not applicable

according to **MARPOL**

73/78, Annex II, and the IBC code

Not applicable Regulatory

Information by Air

Regulations in Japan Regulatory Not applicable

Information by Road

or Rail

Regulatory

Information by Sea

Marine Pollutant Transport in bulk

according to **MARPOL**

73/78.Annex II.and the IBC code

Regulatory

Information by Air

Not applicable

Not applicable

Not applicable

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.

Preparation Date 2012/06/06 Revision Date 2015/03/11

Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name WDR13-B
Product Code WDR13B0001
Company Name PENTEL CO., LTD.

Address 7-2,KOAMICHO,NIHONBASHI,CHUO-KU,TOKYO

Company Contact QUALITY ASSURANCE DEPARTMENT I

Phone Number 048-928-6668 Emergency Phone 048-928-6668

Number

Fax Number 048-928-9190
Mail Address hinpo@pentel.co.jp

Recommended Use ink

and Restriction on

Use

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

Section 2 - HAZARDS IDENTIFICATION GHS Classification

Olassilication

Health Hazards Acute toxicity - inhalation(gas) Category 4

Serious eye damage/eye irritation Category 2B

Sensitization - respiratory Category 1 Reproductive toxicity Category 2

Specific target organ toxicity(single exposure)

Category 2(respiratory

apparatus,heart,kidney,central nervous system)
Specific target organ toxicity(repeated exposure)

Category 2(central nervous

system,liver,respiratory apparatus,heart,kidney)
Acute hazards to the aquatic environment

Environmental Acut

Hazards Category 2

Chronic hazards to the aquatic environment

Category 2

Other hazards than mentioned above are Not

applicable or No data available.

GHS Label Elements

Symbols



Signal Word

Danger

Hazard Statements H320 Causes eye irritation H332 Harmful if inhaled

H334 May cause allergy or asthma symptoms or

breathing difficulties if inhaled

H361 Suspected of damaging fertility or the unborn

child

H371 May cause damage to respiratory apparatus, heart, kidney, central nervous system. H373 May cause damage to liver, respiratory apparatus, heart, kidney, central nervous system through prolonged or repeated exposure.

H401 Toxic to aquatic life

H411 Toxic to aquatic life with long lasting effects

Precautional Statements Prevention Precautionary Statements

Obtain special instructions before use.(P201)

Do not handle until all safety precautions have

been read and understood.(P202)

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

Avoid breathing gas.(P261)

Wash hands thoroughly after handling.(P264)

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

product.(P270)

Use only outdoors or in a well-ventilated

area.(P271)

Avoid release to the environment.(P273) Use personal protective equipment as required.(P281)

In case of inadequate ventilation wear respiratory

protection.(P285)

Response Precautionary Statements IF INHALED: Call a doctor if you feel

unwell.(P304+P312)

IF INHALED: If breathing is difficult, remove victim

to fresh air and keep at rest in a position comfortable for breathing.(P304+P341) IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue

rinsing.(P305+P351+P338)

IF exposed or if you feel unwell: Call a

doctor.(P309+P311)

Get medical advice and attention if you feel

unwell.(P314)

If eye irritation persists: Get medical advice and

attention.(P337+P313)

If experiencing respiratory symptoms: Call a

doctor.(P342+P311) Collect spillage.(P391) Store locked up.(P405)

Storage Precautionary Statements

Disposal Precautionary Statements Dispose of contents and container in accordance with local, regional and national regulations (to be

specified).(P501)

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

Distinction of Substance

mixture

or Mixture

Chemical Name or	Concentration or Its	Formula ENCS No./ISHL No.		/ISHL No.	CAS RN
Generic Name	Ranges	Formula	ENCS No.	ISHL No.	UAS KIN
glycerin	7.3%	CH2OHCH	(2)-	Existing	56-81-5
		(OH)C	242,(7)-		
		H2OH	338		
ethylene glycol	9.7%	HOCH2CH	(2)-230	Existing	107-21-1
		2OH			
diethylene glycol	7.3%	HOCH2CH	(2)-	Existing	111-46-6
		2OCH2C	415,(2)-		
		H2OH	2979		

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

easier breathing.

Get medical advice and attention if you feel unwell.

Skin Contact Wash with soap and plenty of water.

If skin irritation or rash occurs: Get medical

advice and attention.

Eye Contact Wash eyes carefully for several minutes with

water. Take off contact lenses if easily removed,

and continue to wash eyes afterwards.

When the ocular stimulation lasts, Seek medical

treatment and advice.

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

No information available

Get medical advice and attention if you feel unwell.

Section 5 - FIRE FIGHTING MEASURES

Extinguishing Media Carbon dioxide, dry chemicals, water sprinkling,

and general foam extinguishing agents

Section 6 - ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and **Emergency Procedures**

Environmental Pay attention not to cause the influence on the

Precautions environment by discharging into rivers. This product is water pollutant. Prevent soil

contamination, or the product from flowing into the

Decontamination/Absorpti Collect the material into a disposal container by

on/Sweeping/Vacuming/ sucking up or sweeping up.

Neutralization

Absorb spills with inert materials (such as dry sand

or soil) and collect them into chemical-waste

disposal container.

Methods and Equipment Cleansing the contaminated area thoroughly with

for Containment and water after removal.

Cleaning up

Prevention Measures for Prevent flowing into drain, sewage, basement, and

Secondary Accidents closed area.

Remove thoroughly since the smooth and slippery

surface will be formed on the floor.

Section 7 - HANDLING AND STORAGE

Handling Technical Measures Provide ventilation system and Use necessary

> personal protective equipment as described in "8. EXPOSURE CONTROLS AND PERSONAL

Local and General Ventilation

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

Precautions for Safe Avoid the contact with eyes.

Handling

Wash hands thoroughly after handling.

Avoid swallowing

Avoid high temperature and direct sunlight.

Prevents Handling of Refer to "10. STABILITY AND REACTIVITY"

Imcompatible Substances or **Mixtures**

Storage Precautionary

Statements

Technical Measures The storage facility should be privided with

necessary lighting, lighting equipment, and ventilator to store and handle dangerous goods. Refer to "10. STABILITY AND REACTIVITY"

Imcompatible Substances or **Mixtures**

Storage Conditions Have containers keep away from direct sunlight

and heat

Keep away from heat. Store locked up.

Material Used in

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

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

A general proper ventilation is enough to control **Engineering Controls**

concentration in air.

Personal Protective

Equipment

Respiratory Protection

No information available

containers.

Eye Protection Use an adequate personal eye protector.

Goggles (ordinary glass type, ordinary glass type

with side shields, and goggle type) Specific Hygine Measures Wash hands thoroughly after handling. No information available

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance Physical State liquid (viscous liquid)

Colour red
Odour slight odor
pH No data available

Initial Boiling Point and

Boiling Ranges

Flash Point no data available

Auto-Ignition No information available

Section 10 - STABILITY AND REACTIVITY

Stability The material is stable under storage and handling

conditions comprised with the regulations.

Possibility of Hazardous No data available

Reaction

Conditions to Avoid No data available Hazardous Decomposition No data available

Products

Section 11 - TOXICOLOGICAL INFORMATION

Acute Toxicity No information available

Section 12 - ECOLOGICAL INFORMATION

Environmental No information available

Hazards

Ecotoxicity No information available

Section 13 - DISPOSAL CONSIDERATIONS

Residual Waste For disposal, conform with the standards provided

by related laws and local public bodies. Commission the authorized waste disposal

company, or a local public body who conducts the

Recycle containers after cleansing, or carry out

disposal, to dispose of the material.

Contaminated Container

and Packaging the disposal under the related laws and regulations

and the standards of the local governments. $% \frac{\partial f}{\partial x} = \frac{\partial f}{\partial x} + \frac{\partial f}{\partial x$

Section 14 - TRANSPORT INFORMATION

International Regulations Regulatory Not applicable

Information by Sea

UN No. Not applicable

Marine Pollutant Not applicable Regulatory Not applicable

Information by Air

UN No. Not applicable Regulatory Not applicable

Regulations in Japan Regulatory Not app

Information by Road

or Rail

Regulatory Not applicable

Information by Sea

UN No. Not applicable
Marine Pollutant Not applicable
Regulatory Not applicable

Information by Air

UN No. Not applicable

Section 15 - REGULATORY INFORMATION

Regulatory information with regard to this product in your country or in your region should be examined by your own responsibility.

Section 16 - OTHER INFORMATION

Information Contact No information available

Other Property This information is furnished without warranty

express or implied.

This information is believed to be accurate to the best knowledge of PENTEL Co., Ltd. but not assumes leagal responsibility for use of or reliance

upon this information.

Preparation Date 2014/08/12 Revision Date 2016/01/12

Section 1 - CHEMICALS AND COMPANY IDENTIFICATION

Chemical Identifier WDR20-C
Product Code WDR20C0001
Company Name PENTEL CO., LTD.

Address 7-2,KOAMICHO,NIHONBASHI,CHUO-KU,TOKYO

Company Contact QUALITY ASSURANCE DEPARTMENT I

Phone Number 048-928-6668
Fax Number 048-928-9190
Mail Address hinpo@pentel.co.jp
Emergency Phone 048-928-6668

Number

Recommended Use ink

and Restriction on

Use

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

Section 2 - HAZARDS IDENTIFICATION GHS Classification

Health Hazards Serious eye damage/eye irritation Category 2B

Specific target organ toxicity (single exposure)

Category 1(respiratory

apparatus,heart,kidney,central nervous system) Specific target organ toxicity (repeated exposure) Category 1(respiratory apparatus,heart,central

nervous system)

Other hazards than mentioned above are Not

applicable or No data available.

GHS Label Elements

Symbols



Signal Word Danger

Hazard Statements H320 Causes eye irritation

H370 Causes damage to respiratory

apparatus,heart,kidney,central nervous system

H372 Causes damage to respiratory

apparatus, heart, central nervous system through

prolonged or repeated exposure

Precautionary Statements Prevention Precautionary Statements

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

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

product.(P270)

Response Precautionary Statements IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue

rinsing.(P305+P351+P338)

IF exposed or concerned: Call a POISON

CENTER/doctor/...(P308+P311)

Get medical advice and attention if you feel

unwell.(P314)

Specific treatment.(P321)

If eve irritation persists: Get medical advice and

attention.(P337+P313) Store locked up.(P405)

Storage Precautionary

Statements
Disposal Dispose of contents and container in accordance

Precautionary Statements with local, regional and national regulations (to be

specified).(P501)

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

Distinction of Substance mixture

or Mixture

OF WIINCULE					
Chemical Name or	Concentration or Its	Concentration or Its Formula ENCS No./ISHL No.		/ISHL No.	CAS RN
Generic Name	Ranges	i oriiiuia	ENCS No.	ISHL No.	UAS NN
Ethylene glycol	12.6%	HOCH2CH	(2)-230	Existing	107-21-1
		20H			
Glycerin	8.7%	CH2OHCH	(2)-	Existing	56-81-5
		(OH)C	242,(7)-		
		H2OH	338		
Thiodiglycol	9.4%	HOCH2CH	(2)-470	Existing	111-48-8
		2SCH2C			
		H2OH			

Impurities and/or

Stabilizing Additives which

Contribute to the

No information available

Section 4 - FIRST AID MEASURES

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

Eye Contact

Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do.

Continue rinsing.

When the ocular stimulation lasts, Seek medical

treatment and advice.

Ingestion Rinse mouth. Do NOT induce vomiting.

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 Wash hand thoroughly after handling.

Handling

Avoid swallowing.

Avoid contact with eves.

Protect from high temperature and direct sunlight.

Prevents Handling of Refer to "Section 10 - STABILITY AND

Imcompatible

REACTIVITY".

Substances or Mixtures

Storage Precautionary

Statements

Technical Measures Refer to "Section 10 - STABILITY AND

REACTIVITY".

Have containers keep away from direct sunlight

Use personal respiratory equipment as required.

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

Hand Protection Use personal gloves as required. Eve 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 liauid

> Form liquid (viscous liquid)

Colour blue

Odour odorless

Odour threshold No data available No data available На Melting Point/Freezing No data available

Point

Initial Boiling Point and No data available

Boiling Ranges

Flash Point no data available **Evaporation Rate** No data available Flammability (solid, gas) No data available Flammability or Explosive Lower Limit No data available

Limits

Upper Limit No data available

Vapour Pressure No data available Vapour Density No data available Specific Gravity (Density) No data available

Partition Coefficient: n-No data available

Octanol/Water

No data available Auto-Ignition No data available Decomposition

Temperature

No data available Viscosity Kinematic viscosity No data available

Section 10 - STABILITY AND REACTIVITY

Reactivity No data available Chemical stability No data available Possibility of Hazardous No data available

Reaction

No data available Conditions to Avoid Imcompatible Substances No data available

or Mixtures

No data available Hazardous Decomposition

Products

Section 11 - TOXICOLOGICAL INFORMATION

Acute Toxicity No information available

Skin Corrosion/Irritation No data available No data available Serious eye damage/eye

irritation

No data available Respiratory or Skin

Sensitization

No data available Germ Cell Mutagenicity Carcinogenicity No data available Reproductive Toxicity No data available Specific target organ No data available

toxicity (single exposure)

Specific target organ No data available

toxicity (repeated

exposure)

No data available Aspiration Hazard

Section 12 - ECOLOGICAL INFORMATION

Hazard to the aquatic No data available

environment (acute

Hazard to the aquatic No data available

environment (long-term

hazard)

Hazard to the ozone layer No data available

Section 13 - DISPOSAL CONSIDERATIONS

Residual Waste Disposal should be in accordance with applicable

regulations and standards by the respective local

governments.

Commission a waste disposal company, or a local public body who are licensed by local or regional

government, to dispose of the material.

Contaminated Container Recycle containers after cleansing, or carry out and Packaging the disposal under the related laws and regulations

and the standards of the local governments.

Section 14 - TRANSPORT INFORMATION

International Regulations Not applicable Regulatory

Information by Sea

Marine Pollutant Not applicable Not applicable

Transport in bulk

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 leagal responsibility for use of or reliance

upon this information.

Preparation Date 2014/08/12 Revision Date 2016/01/12

Section 1 - CHEMICALS AND COMPANY IDENTIFICATION

Chemical Identifier WDR20-D
Product Code WDR20D0001
Company Name PENTEL CO., LTD.

Address 7-2,KOAMICHO,NIHONBASHI,CHUO-KU,TOKYO

Company Contact QUALITY ASSURANCE DEPARTMENT I

Phone Number 048-928-6668
Fax Number 048-928-9190
Mail Address hinpo@pentel.co.jp
Emergency Phone 048-928-6668

Number

Recommended Use ink

and Restriction on

Use

BLN75,BLN77,BL17,BL27,BL57,BL60,BL77,BL80,B

L107,LR7,LRN5-D

Section 2 - HAZARDS IDENTIFICATION GHS Classification

Health Hazards

Serious eye damage/eye irritation Category 2B Specific target organ toxicity (single exposure)

Category 1(respiratory

apparatus,heart,kidney,central nervous system)
Specific target organ toxicity (repeated exposure)
Category 1(respiratory apparatus,heart,central

nervous system)

Other hazards than mentioned above are Not

applicable or No data available.

GHS Label Elements

Symbols



Signal Word Danger

Hazard Statements H320 Causes eye irritation

H370 Causes damage to respiratory

apparatus,heart,kidney,central nervous system

H372 Causes damage to respiratory

apparatus, heart, central nervous system through

prolonged or repeated exposure

Precautionary Statements Prevention Precautionary Statements

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

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

product.(P270)

Response Precautionary Statements IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue

rinsing.(P305+P351+P338)

IF exposed or concerned: Call a POISON

CENTER/doctor/...(P308+P311)

Get medical advice and attention if you feel

unwell.(P314)

Specific treatment.(P321)

If eve irritation persists: Get medical advice and

attention.(P337+P313) Store locked up.(P405)

Storage Precautionary Statements

Dispose of contents and container in accordance with local, regional and national regulations (to be

Precautionary Statements

Disposal

specified).(P501)

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

Distinction of Substance mixture

or Mixture

OI MIXCOI O					
Chemical Name or	Concentration or Its	Formula	ENCS No.	/ISHL No.	CAS RN
Generic Name	Ranges	i oriliula	ENCS No.	ISHL No.	UAS KIN
Ethylene glycol	12.6%	HOCH2CH	(2)-230	Existing	107-21-1
		2OH			
Glycerin	8.6%	CH2OHCH	(2)-	Existing	56-81-5
		(OH)C	242,(7)-		
		H2OH	338		
Thiodiglycol	9.4%	HOCH2CH	(2)-470	Existing	111-48-8
		2SCH2C			
		H2OH			

Impurities and/or

Stabilizing Additives which

Contribute to the

No information available

Section 4 - FIRST AID MEASURES

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

Rinse cautiously with water for several minutes.
Remove contact lenses, if present and easy to do.

Continue rinsing.

When the ocular stimulation lasts, Seek medical

treatment and advice.

Ingestion Rinse mouth. Do NOT induce vomiting.

Section 5 - FIRE FIGHTING MEASURES

Extinguishing Media Dry chemicals, CO2, water spray or regular foam.

Section 6 - ACCIDENTAL RELEASE MEASURES

Environmental Precautions

Pay attention not to cause the influence on the environment by discharging into rivers.

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

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

Methods and Equipment for Containment and

Cleaning up

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 Wash hand thoroughly after handling.

Handling

Avoid swallowing.

Avoid contact with eves.

Protect from high temperature and direct sunlight.

Prevents Handling of Refer to "Section 10 - STABILITY AND

Imcompatible

REACTIVITY".

Substances or Mixtures

Storage Precautionary

Statements

Technical Measures Refer to "Section 10 - STABILITY AND

REACTIVITY".

Have containers keep away from direct sunlight

Use personal respiratory equipment as required.

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

Hand Protection Use personal gloves as required. Eve 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 liauid

> Form liquid (viscous liquid)

Colour green

Odour odorless

Odour threshold No data available No data available На Melting Point/Freezing No data available

Point

Initial Boiling Point and No data available

Boiling Ranges

Flash Point no data available **Evaporation Rate** No data available Flammability (solid, gas) No data available Flammability or Explosive Lower Limit No data available

Limits

Upper Limit No data available

Vapour Pressure No data available Vapour Density No data available Specific Gravity (Density) No data available

Partition Coefficient: n-No data available

Octanol/Water

No data available Auto-Ignition No data available Decomposition

Temperature

No data available Viscosity Kinematic viscosity No data available

Section 10 - STABILITY AND REACTIVITY

Reactivity No data available Chemical stability No data available Possibility of Hazardous No data available

Reaction

No data available Conditions to Avoid Imcompatible Substances No data available

or Mixtures

No data available Hazardous Decomposition

Products

Section 11 - TOXICOLOGICAL INFORMATION

Acute Toxicity No information available

Skin Corrosion/Irritation No data available No data available Serious eye damage/eye

irritation

No data available Respiratory or Skin

Sensitization

No data available Germ Cell Mutagenicity Carcinogenicity No data available Reproductive Toxicity No data available Specific target organ No data available

toxicity (single exposure)

Specific target organ No data available

toxicity (repeated

exposure)

No data available Aspiration Hazard

Section 12 - ECOLOGICAL INFORMATION

Hazard to the aquatic No data available

environment (acute

Hazard to the aquatic No data available

environment (long-term

hazard)

Hazard to the ozone layer No data available

Section 13 - DISPOSAL CONSIDERATIONS

Residual Waste Disposal should be in accordance with applicable

regulations and standards by the respective local

governments.

Commission a waste disposal company, or a local

public body who are licensed by local or regional

government, to dispose of the material.

Contaminated Container Recycle containers after cleansing, or carry out and Packaging the disposal under the related laws and regulations

and the standards of the local governments.

Section 14 - TRANSPORT INFORMATION

International Regulations Not applicable Regulatory

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

Not applicable Marine Pollutant Transport in bulk Not applicable

according to **MARPOL**

73/78, Annex II, and

the IBC code

Regulatory Not applicable

Information by Air

Not applicable

Emergency Response 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 leagal responsibility for use of or reliance

upon this information.

Preparation Date 2014/08/12 Revision Date 2016/01/12

Section 1 - CHEMICALS AND COMPANY IDENTIFICATION

Chemical Identifier WDR20-V
Product Code WDR20V0001
Company Name PENTEL CO., LTD.

Address 7-2,KOAMICHO,NIHONBASHI,CHUO-KU,TOKYO

Company Contact QUALITY ASSURANCE DEPARTMENT I

Phone Number 048-928-6668
Fax Number 048-928-9190
Mail Address hinpo@pentel.co.jp
Emergency Phone 048-928-6668

Number

Recommended Use ink

and Restriction on

Use

BLN15,BLN25,BLN75,BLN77,BL17,BL27,BL57,BL6

0,BL77,BL80,BL107,LRN7,LR7,LR10-V

Section 2 - HAZARDS IDENTIFICATION GHS Classification

Health Hazards S

Serious eye damage/eye irritation Category 2B Specific target organ toxicity (single exposure)

Category 1(respiratory

apparatus,heart,kidney,central nervous system)
Specific target organ toxicity (repeated exposure)
Category 1(respiratory apparatus,heart,central

nervous system)

Other hazards than mentioned above are Not

applicable or No data available.

GHS Label Elements

Symbols



Signal Word Danger

Hazard Statements H320 Causes eye irritation

H370 Causes damage to respiratory

apparatus,heart,kidney,central nervous system

H372 Causes damage to respiratory

apparatus, heart, central nervous system through

prolonged or repeated exposure

Precautionary Statements Prevention Precautionary Statements

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

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

product.(P270)

Response Precautionary Statements

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue

rinsing.(P305+P351+P338)

IF exposed or concerned: Call a POISON

CENTER/doctor/...(P308+P311)

Get medical advice and attention if you feel

unwell.(P314)

Specific treatment.(P321)

If eve irritation persists: Get medical advice and

attention (P337+P313) Store locked up.(P405)

Storage Precautionary Statements

Disposal Precautionary

Statements

Dispose of contents and container in accordance with local, regional and national regulations (to be

specified).(P501)

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

Distinction of Substance mixture

or Mixture

OI MIXCOI O					
Chemical Name or	Concentration or Its	Formula	ENCS No.	/ISHL No.	CAS RN
Generic Name	Ranges	i oriliula	ENCS No.	ISHL No.	UAS KIN
Ethylene glycol	12.6%	HOCH2CH	(2)-230	Existing	107-21-1
		2OH			
Glycerin	8.6%	CH2OHCH	(2)-	Existing	56-81-5
		(OH)C	242,(7)-		
		H2OH	338		
Thiodiglycol	9.4%	HOCH2CH	(2)-470	Existing	111-48-8
		2SCH2C			
		H2OH			

Impurities and/or

Stabilizing Additives which

Contribute to the

No information available

Section 4 - FIRST AID MEASURES

Inhalation Skin Contact

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

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

When the ocular stimulation lasts. Seek medical

treatment and advice.

Ingestion Rinse mouth. Do NOT induce vomiting.

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".

Handling

Precautions for Safe Wash hand thoroughly after handling.

Avoid swallowing.

Avoid contact with eves.

Protect from high temperature and direct sunlight.

Prevents Handling of Refer to "Section 10 - STABILITY AND

REACTIVITY".

Imcompatible

Substances or

Mixtures

Technical Measures Refer to "Section 10 - STABILITY AND

REACTIVITY".

Have containers keep away from direct sunlight

Use personal respiratory equipment as required.

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

Storage Precautionary

Equipment

Statements

Respiratory Protection

Hand Protection Use personal gloves as required. Eve 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 liauid

> Form liquid (viscous liquid)

Colour purple

Odour odorless

Odour threshold No data available No data available На Melting Point/Freezing No data available

Point

Initial Boiling Point and No data available

Boiling Ranges

Flash Point no data available **Evaporation Rate** No data available Flammability (solid, gas) No data available Flammability or Explosive Lower Limit No data available

Limits

Upper Limit No data available

Vapour Pressure No data available Vapour Density No data available Specific Gravity (Density) No data available

Partition Coefficient: n-No data available

Octanol/Water

No data available Auto-Ignition No data available Decomposition

Temperature

No data available Viscosity Kinematic viscosity No data available

Section 10 - STABILITY AND REACTIVITY

Reactivity No data available Chemical stability No data available Possibility of Hazardous No data available

Reaction

No data available Conditions to Avoid Imcompatible Substances No data available

or Mixtures

No data available Hazardous Decomposition

Products

Section 11 - TOXICOLOGICAL INFORMATION

Acute Toxicity No information available

Skin Corrosion/Irritation No data available No data available Serious eye damage/eye

irritation

No data available Respiratory or Skin

Sensitization

No data available Germ Cell Mutagenicity Carcinogenicity No data available Reproductive Toxicity No data available Specific target organ No data available

toxicity (single exposure)

Specific target organ No data available

toxicity (repeated

exposure)

No data available Aspiration Hazard

Section 12 - ECOLOGICAL INFORMATION

Hazard to the aquatic No data available

environment (acute

Hazard to the aquatic No data available

environment (long-term

hazard)

Hazard to the ozone layer No data available

Section 13 - DISPOSAL CONSIDERATIONS

Residual Waste Disposal should be in accordance with applicable

regulations and standards by the respective local

governments.

Commission a waste disposal company, or a local

public body who are licensed by local or regional government, to dispose of the material.

Contaminated Container Recycle containers after cleansing, or carry out and Packaging the disposal under the related laws and regulations

and the standards of the local governments.

Section 14 - TRANSPORT INFORMATION

International Regulations Not applicable Regulatory

Information by Sea

Marine Pollutant Not applicable Transport in bulk

lk 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 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.

Preparation Date 2012/01/13 Revision Date 2016/01/

Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name 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 048-928-6668 Emergency Phone 048-928-6668

Number

Fax Number 048-928-9190 Mail Address hinpo@pentel.co.jp

Recommended Use and Restriction on

Use

LR7-F, BL77-F, BL107FF-F

Section 2 - HAZARDS IDENTIFICATION GHS Classification

No classification standards applicable

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS Distinction of Substance mixture

or Mixture

	Formula			CAS RN
Ranges	Tormara	ENCS No.	ISHL No.	OAO IIII
11. 5%	CH20HCH	(2) –	Existing	56-81-5
	(OH) C	242, (7) –		
	H20H	338		
5%	HOCH2CH	(2)-230	Existing	107-21-1
	20H			
9%	HOCH2CH	(2) -470	Existing	111-48-8
	2SCH2C			
	H20H			
0. 7%	N (CH2CH2	(2) - 308	Existing	102-71-6
	OH) 3			
	5% 9%	Ranges 11. 5% CH20HCH (0H) C H20H 5% H0CH2CH 20H 9% H0CH2CH 2SCH2C H20H 0. 7% N (CH2CH2	Ranges	Ranges

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

Section 4 - FIRST AID MEASURES

Inhalation If breathing is difficult, move affected per

the open air. Keep him or her at rest to al

easier breathing.

Get medical advice and attention if you fee

Skin Contact Wash with soap and plenty of water.

If skin irritation or rash occurs: Get med

advice and attention.

Eye Contact Wash eyes carefully for several minutes witl

water. Take off contact lenses if easily ren

and continue to wash eyes afterwards.

When the ocular stimulation lasts, Seek med

treatment and advice.

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

Get medical advice and attention if you fee

Section 5 - FIRE FIGHTING MEASURES

Carbon dioxide, dry chemicals, water sprink Extinguishing Media general foam extinguishing agents

Section 6 - ACCIDENTAL RELEASE MEASURES

Personal Precautions. Protective Equipment and

Emergency Procedures

Environmental Pay attention not to cause the influence on the

Precautions environment by discharging into rivers.

> This product is water pollutant, Prevent soil contamination, or the product from flowing into the

drain systems

No information available

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

on/Sweeping/Vacuming/

Neutralization

Absorb spills with inert materials (such as dry sand

or soil) and collect them into chemical-waste

disposal container.

Cleansing the contaminated area thoroughly with Methods and Equipment

for Containment and water after removal.

Cleaning up

Prevention Measures for Prevent flowing into drain, sewage, basement, and

Secondary Accidents closed area.

Remove thoroughly since the smooth and slippery

surface will be formed on the floor.

Section 7 - HANDLING AND STORAGE

Technical Measures Provide ventilation system and Use necessary Handling

personal protective equipment as described in "8. EXPOSURE CONTROLS AND PERSONAL

Local and General Ventilation

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

Precautions for Safe Avoid the contact with eyes.

Handling

Wash hands thoroughly after handling.

Avoid swallowing

Avoid high temperature and direct sunlight. Prevents Handling of Refer to "10. STABILITY AND REACTIVITY"

Imcompatible Substances or **Mixtures**

Storage Precautionary

Statements

Technical Measures The storage facility should be privided with

necessary lighting, lighting equipment, and ventilator to store and handle dangerous goods. Refer to "10. STABILITY AND REACTIVITY"

Imcompatible Substances or **Mixtures**

Storage Conditions Have containers keep away from direct sunlight

and heat.

Keep away from heat. Store locked up.

Material Used in

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

containers.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls A general proper ventilation is enough to control

concentration in air.

Personal Protective

Equipment

Respiratory Protection

No information available

Eye Protection Use an adequate personal eye protector.

Goggles (ordinary glass type, ordinary glass type

with side shields, and goggle type)

Specific Hygine Measures Wash hands thoroughly after handling.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical State liquid (viscous liquid) Appearance

Colour orange Odour slight odor рΗ No data available

Initial Boiling Point and

Boiling Ranges

Flash Point Auto-Ignition no data available

No information available

No information available

Section 10 - STABILITY AND REACTIVITY

Stability

The material is stable under storage and handling

conditions comprised with the regulations.

Possibility of Hazardous No data available

Reaction

Conditions to Avoid Hazardous Decomposition

Products

No data available

No data available

Section 11 - TOXICOLOGICAL INFORMATION

No information available Acute Toxicity

Section 12 - ECOLOGICAL INFORMATION

Environmental

Hazards

No information available

No information available **Ecotoxicity**

Section 13 - DISPOSAL CONSIDERATIONS

Residual Waste For disposal, conform with the standards provided

> by related laws and local public bodies. Commission the authorized waste disposal

company, or a local public body who conducts the

disposal, to dispose of the material.

Contaminated Container

Regulations in Japan

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

UN No.

Not applicable Marine Pollutant Not applicable Not applicable Regulatory

Information by Air

UN No. Not applicable Regulatory Not applicable

Information by Road

or Rail

Regulatory Not applicable

Information by Sea

UN No. Not applicable Marine Pollutant

Regulatory Information by Air

UN No. Not applicable

Not applicable Not applicable

Section 15 - REGULATORY INFORMATION

Regulatory information with regard to this product in your country or in your region should be examined by your own responsibility.

Section 16 - OTHER INFORMATION

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.

Preparation Date 2013/11/21 Revision Date 2016/01/

Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name 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 048-928-6668 Emergency Phone 048-928-6668

Number

Fax Number 048-928-9190 Mail Address hinpo@pentel.co.jp

Recommended Use and Restriction on

Use

LR7-P, BL77-P, BL107FP-P

Section 2 - HAZARDS IDENTIFICATION GHS Classification

No classification standards applicable

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS Distinction of Substance mixture

or Mixture

Chemical Name or	Concentration or	Formula		/ISHL No.	CAS RN
Generic Name	Ranges		ENCS No.	ISHL No.	
Glycerin	11. 5%	CH20HCH	(2) –	Existing	56-81-5
		(OH) C	242, (7) –		
		H20H	338		
Ethylene glycol	5%	HOCH2CH	(2) - 230	Existing	107-21-1
		20H			
Thiodiethylene glycol	9%	HOCH2CH	(2)-470	Existing	111-48-8
		2SCH2C			
		H20H			
Triethanolamine	0. 7%	N (CH2CH2	(2) - 308	Existing	102-71-6
		0H) 3			

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

Section 4 - FIRST AID MEASURES

Inhalation If breathing is difficult, move affected per

the open air. Keep him or her at rest to al

easier breathing.

Get medical advice and attention if you fee

Skin Contact Wash with soap and plenty of water.

If skin irritation or rash occurs: Get med

advice and attention.

Eye Contact Wash eyes carefully for several minutes witl

water. Take off contact lenses if easily ren

and continue to wash eyes afterwards.

When the ocular stimulation lasts, Seek med

treatment and advice.

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

Get medical advice and attention if you fee

Section 5 - FIRE FIGHTING MEASURES Extinguishing Media

Carbon dioxide, dry chemicals, water sprink

general foam extinguishing agents

Section 6 - ACCIDENTAL RELEASE MEASURES

Personal Precautions. Protective Equipment and Emergency Procedures

No information available

Environmental

Pay attention not to cause the influence on the

Precautions environment by discharging into rivers.

This product is water pollutant, Prevent soil contamination, or the product from flowing into the

drain systems

Decontamination/Absorpti on/Sweeping/Vacuming/

Collect the material into a disposal container by

sucking up or sweeping up.

Neutralization

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

disposal container.

Methods and Equipment for Containment and

Cleansing the contaminated area thoroughly with

water after removal.

Cleaning up

Prevention Measures for Prevent flowing into drain, sewage, basement, and Secondary Accidents

closed area.

Remove thoroughly since the smooth and slippery

surface will be formed on the floor.

Section 7 - HANDLING AND STORAGE

Handling

Technical Measures Provide ventilation system and Use necessary personal protective equipment as described in "8.

EXPOSURE CONTROLS AND PERSONAL

Local and General Ventilation

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

Precautions for Safe Avoid the contact with eyes.

Handling

Wash hands thoroughly after handling.

Avoid swallowing

Avoid high temperature and direct sunlight. Prevents Handling of Refer to "10. STABILITY AND REACTIVITY"

Imcompatible Substances or **Mixtures**

Storage Precautionary

Statements

Technical Measures The storage facility should be privided with

necessary lighting, lighting equipment, and ventilator to store and handle dangerous goods. Refer to "10. STABILITY AND REACTIVITY"

Imcompatible Substances or **Mixtures**

Storage Conditions Have containers keep away from direct sunlight

and heat.

Keep away from heat. Store locked up.

Material Used in

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

containers.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls A general proper ventilation is enough to control

concentration in air.

Personal Protective

Equipment

Respiratory Protection

No information available

Eye Protection Use an adequate personal eye protector.

Goggles (ordinary glass type, ordinary glass type

with side shields, and goggle type)

Specific Hygine Measures Wash hands thoroughly after handling.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

Physical State liquid (viscous liquid) Appearance

Colour pink Odour slight odor рΗ No data available

Initial Boiling Point and

Boiling Ranges

Flash Point Auto-Ignition no data available

No information available

No information available

Section 10 - STABILITY AND REACTIVITY

Stability

The material is stable under storage and handling

conditions comprised with the regulations.

Possibility of Hazardous No data available

Reaction

Conditions to Avoid Hazardous Decomposition

Products

No data available

No data available

Section 11 - TOXICOLOGICAL INFORMATION

No information available Acute Toxicity

Section 12 - ECOLOGICAL INFORMATION

Environmental

Hazards

No information available

No information available **Ecotoxicity**

Section 13 - DISPOSAL CONSIDERATIONS

Residual Waste For disposal, conform with the standards provided

> by related laws and local public bodies. Commission the authorized waste disposal

company, or a local public body who conducts the

disposal, to dispose of the material.

Contaminated Container

Regulations in Japan

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

UN No.

Not applicable Marine Pollutant Not applicable Not applicable Regulatory

Information by Air

UN No. Not applicable Regulatory Not applicable

Information by Road

or Rail

Regulatory Not applicable

Information by Sea

UN No. Not applicable Marine Pollutant Not applicable

Information by Air

Regulatory

UN No. Not applicable

Section 15 - REGULATORY INFORMATION

Regulatory information with regard to this product in your country or in your region should be examined by your own responsibility.

Section 16 - OTHER INFORMATION

Information Contact No information available

Other Property This information is furnished without warranty

express or implied.

Not applicable

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.

Preparation Date 2012/01/13 Revision Date 2016/01/

Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name 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 048-928-6668 Emergency Phone 048-928-6668

Number

Fax Number 048-928-9190 Mail Address hinpo@pentel.co.jp

Recommended Use and Restriction on

Use

LR7-S, BL77-S, BL77FS-S

Section 2 - HAZARDS IDENTIFICATION GHS Classification

No classification standards applicable

Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS Distinction of Substance mixture

or Mixture

Chemical Name or Generic Name	Concentration or Ranges	Formula	ENCS No.	/ISHL No. ISHL No.	CAS RN
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Thiodiethylene glycol	9%	HOCH2CH 2SCH2C H2OH	(2) –470	Existing	111-48-8
Triethanolamine	0. 7%	N (CH2CH2 OH) 3	(2) -308	Existing	102-71-6

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

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If skin irritation or rash occurs: Get med

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treatment and advice.

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Section 5 - FIRE FIGHTING MEASURES Extinguishing Media

Carbon dioxide, dry chemicals, water sprink general foam extinguishing agents

Section 6 - ACCIDENTAL RELEASE MEASURES

Personal Precautions. Protective Equipment and

Emergency Procedures

Environmental Pay attention not to cause the influence on the

Precautions environment by discharging into rivers.

> This product is water pollutant, Prevent soil contamination, or the product from flowing into the

drain systems

No information available

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

on/Sweeping/Vacuming/

Neutralization

Absorb spills with inert materials (such as dry sand

or soil) and collect them into chemical-waste

disposal container.

Cleansing the contaminated area thoroughly with Methods and Equipment

for Containment and water after removal.

Cleaning up

Prevention Measures for Prevent flowing into drain, sewage, basement, and

Secondary Accidents closed area.

Remove thoroughly since the smooth and slippery

surface will be formed on the floor.

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Technical Measures Provide ventilation system and Use necessary Handling

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Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls A general proper ventilation is enough to control

concentration in air.

Personal Protective

Equipment

Respiratory Protection

No information available

Eye Protection Use an adequate personal eye protector.

Goggles (ordinary glass type, ordinary glass type

with side shields, and goggle type)

Specific Hygine Measures Wash hands thoroughly after handling.

Section 9 - PHYSICAL AND CHEMICAL PROPERTIES

No information available

no data available

Physical State liquid (viscous liquid) Appearance

Colour skyblue Odour slight odor рΗ No data available

Initial Boiling Point and

Boiling Ranges

Flash Point

Auto-Ignition No information available

Section 10 - STABILITY AND REACTIVITY

Stability The material is stable under storage and handling

conditions comprised with the regulations.

Possibility of Hazardous No data available

Reaction

Conditions to Avoid No data available Hazardous Decomposition No data available

Products

Section 11 - TOXICOLOGICAL INFORMATION

No information available Acute Toxicity

Section 12 - ECOLOGICAL INFORMATION

No information available Environmental

Hazards

No information available **Ecotoxicity**

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Residual Waste For disposal, conform with the standards provided

> by related laws and local public bodies. Commission the authorized waste disposal

company, or a local public body who conducts the

Recycle containers after cleansing, or carry out

disposal, to dispose of the material.

Contaminated Container

Regulations in Japan

and Packaging 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

UN No.

Not applicable Marine Pollutant Not applicable Not applicable Regulatory

Information by Air

UN No. Not applicable Regulatory Not applicable

Information by Road

or Rail

Regulatory Not applicable

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Information by Air

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