Safety Data Sheet (SDS)

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 hinpo@pentel.co.jp Mail Address 048-928-6668

Emergency Phone

Number

Recommended Use ink and Restriction on

Use

LRN5/7, LRN5H, LRNT5, LR7/10, BLN15/23/25/75, BLN105, BL17/27/30/107-ABL60, 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.	
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.

Safety Data Sheet (SDS)

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

Section 1 - CHEMICALS AND COMPANY IDENTIFICATION

Chemical IdentifieWDR14-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 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 BLN15/25/75/105-B

(X) LRN5, LRN5H, LSN5H, XLRNT5-B

Section 2 - HAZARDS IDENTIFICATION GHS Classification

Health Hazards

Environmental

Acute toxicity - inhalation (gas) Category Serious eye damage/eye irritation Category Sensitization - respiratory Category 1

Reproductive toxicity Category 2

Specific target organ toxicity (single expo

Category 2(respiratory

apparatus, heart, kidney, central nervous syst Specific target organ toxicity (repeated ex

Category 2(liver, respiratory

apparatus, heart, kidney, central nervous syst 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

Hazards



Signal Word

Danger

Hazard Statements H320 Causes eye irritation H332 Harmful if inhaled

H334 May cause allergy or asthma symptoms o

breathing difficulties if inhaled

H361 Suspected of damaging fertility or the

unborn child

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

H411 Toxic to aquatic life with long lastin

Precautionary Statements

Prevention Precautionary Statements Wear protective gloves.(P280)

Wear respiratory protection.(P284)

Do not get in eyes, on skin, or on clothing.(P262) IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

Precautionary Statements

Response

present and easy to do. Continue

rinsing.(P305+P351+P338)

Call a doctor if you feel unwell.(P312)

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)

Storage Store locked up.(P405)

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 wincer o					
Chemical Name or	Concentration or Its	Formula	ENCS No./ISHL No.		CAS RN
Generic Name	Ranges	Formula	ENCS No.	ISHL No.	CAS KIN
Glycerin	7.3%	CH2OHCH	(2)-	Existing	56-81-5
		(OH)C	242,(7)-		
		H2OH	338		
Etlylene 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 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.

Get medical advice and attention. 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

environment by discharging into rivers. **Precautions**

> 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 for Containment and with water.

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

 $^{\prime}$ Section 8 - EXPOSURE CONTROLS /

PERSONAL PROTECTION".

Precautions for Safe Use only outdoors or in a well-ventilated area.

Handling

Wash hand thoroughly after 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 Wash hand thoroughly after handling.

Measures

Storage Precautionary Technical Measures

Statements

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

Refer to "Section 10 - STABILITY AND

The storage facility should be provided with

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.

Engineering Controls Carry out handling of the material in the workplace

equipped with a full ventilation system.

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 red

Odour slight odor

Odour threshold

pH

No data available

No data available

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

Vapour Density

Specific Gravity (Density)

Partition Coefficient: n
No data available

No data available

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

No data available

No data available

No data available

No data available

Specific target organ

toxicity (single exposure)

Specific target organ toxicity (repeated

exposure)

Aspiration Hazard No data available

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 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 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 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

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 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	Formula	ENCS No.	/ISHL No.	CAS RN
Generic Name	Ranges	Torritula	ENCS No.	ISHL No.	UAS KN
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			
		Н2ОН			

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 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

government, to dispose of the material.

public body who are licensed by local or regional

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 ${\rm I\hspace{-.1em}I}$,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.

Safety Data Sheet (SDS)

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

Section 1 - CHEMICALS AND COMPANY IDENTIFICATION

Chemical IdentifieWDR20-D Product Code WDR20D0001 Company Name PENTEL CO., LTD.

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

Company Contact QUALITY ASSURANCE DEPARTMENT I

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

Emergency Phone

Number

Recommended Use ink and Restriction on

Use

BLN15/25/75/105, BLN77, BL17/27/57/77, BL60,

BL80, BL107, LR7, LRN5-D

Section 2 - HAZARDS IDENTIFICATION GHS Classification

Health Hazards

Serious eve damage/eve irritation Category Specific target organ toxicity (single expo

Category 1 (respiratory

apparatus, heart, kidney, central nervous syst Specific target organ toxicity (repeated ex Category 1 (respiratory apparatus, heart, cent

nervous system)

Other hazards than mentioned above are Not

applicable or No data available.

GHS Label Elements

Symbols



Signal Word Danger

Hazard Statements H320 Causes eye irritation

H370 Causes damage to respiratory

apparatus, heart, kidney, central nervous syst

H372 Causes damage to respiratory

apparatus, heart, central nervous system thro

prolonged or repeated exposure

Precautionary Statements Prevention Precautionary Statements

Do not breathe mist, vapours and spray. (P26

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

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

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 No data available

environment (acute

Hazard to the aquatic No data available

environment (long-term

Contaminated Container

and Packaging

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.

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

Not applicat

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

Section 1 - CHEMICALS AND COMPANY IDENTIFICATION

Chemical IdentifieWDR20-V Product Code WDR20V0001 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 hinpo@pentel.co.jp Mail Address Emergency Phone 048-928-6668

Number

Recommended Use ink and Restriction on

Use

BLN15, BLN25, BLN75, BLN105, BL17, BL27, BL57, BL60, BL77, BL80, BL107, LRN7, LR7, LR10-V

Section 2 - HAZARDS IDENTIFICATION GHS Classification

Health Hazards

Serious eve damage/eve irritation Category Specific target organ toxicity (single expo

Category 1 (respiratory

apparatus, heart, kidney, central nervous syst Specific target organ toxicity (repeated ex Category 1 (respiratory apparatus, heart, cent

nervous system)

Other hazards than mentioned above are Not

applicable or No data available.

GHS Label Elements

Symbols



Signal Word Danger

Hazard Statements H320 Causes eye irritation

H370 Causes damage to respiratory

apparatus, heart, kidney, central nervous syst

H372 Causes damage to respiratory

apparatus, heart, central nervous system thro

prolonged or repeated exposure

Precautionary Statements Prevention Precautionary Statements

Do not breathe mist, vapours and spray. (P26

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

product. (P270)

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

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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

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Continue rinsing.

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treatment and advice.

Ingestion Rinse mouth. Do NOT induce vomiting.

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Vacuum or sweep up material and place in a

disposal container.

Methods and Equipment for Containment and

Cleaning up

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Prevents Handling of Refer to "Section 10 - STABILITY AND

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Imcompatible

Substances or

Mixtures

Technical Measures Refer to "Section 10 - STABILITY AND

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and heat.

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Engineering Controls Good general ventilation should be sufficient to

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Storage Precautionary

Equipment

Statements

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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.

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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

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Boiling Ranges

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according to MARPOL

73/78,Annex II,and

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Not applicable

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Information by Road

or Rail

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