

## Safety Data Sheet (SDS)

Preparation Date 2015/07/21

Revision Date 2019/01/31

## Section 1 – CHEMICALS AND COMPANY IDENTIFICATION

Chemical Identifier WPB20-X  
 Product Code WPB20X0002  
 Company Name PENTEL CO., LTD.  
 Address 7-2,KOAMICHO,NIHONBASHI,CHUO-KU,TOKYO  
 Company Contact QUALITY ASSURANCE DEPARTMENT I  
 Phone Number 03-5695-7210  
 Fax Number 03-5645-8204  
 Mail Address hinpo@pentel.co.jp  
 Emergency Phone Number 03-5695-7210  
 Recommended Use ink  
 and Restriction on Use  
 K108-X, K118-X, KF8-X, BG208-X, K230-X,  
 KFR10-X, WPB14-X

## Section 2 – HAZARDS IDENTIFICATION

## GHS Classification

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

## GHS Label Elements

## Symbols



Signal Word Warning  
 Hazard Statements H319 Causes serious eye irritation  
 H332 Harmful if inhaled  
 H371 May cause damage to blood,respiratory apparatus,kidney,central nervous system  
 H373 May cause damage to respiratory apparatus through prolonged or repeated exposure  
 Precautionary Statements  
 Prevention Avoid breathing dust and fume.(P261)  
 Precautionary Statements  
 Wear eye protection and face protection.(P280)  
 Do not breathe mist, vapours and spray.(P260)  
 Avoid breathing mist, vapours and spray.(P261)  
 Wash hand thoroughly after handling.(P264)  
 Wash eye thoroughly after handling.(P264)

Response Precautionary Statements	Do not eat, drink or smoke when using this product.(P270) Use only outdoors or in a well-ventilated area.(P271) IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.(P304+P340) 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) Call a doctor if you feel unwell.(P312) Get medical advice and attention if you feel unwell.(P314) If eye irritation persists: Get medical advice and attention.(P337+P313)
Storage Precautionary Statements Disposal Precautionary Statements	Store locked up.(P405)  Dispose of contents and container in accordance with local, regional and national regulations (to be specified).(P501)

**Section 3 – COMPOSITION / INFORMATION ON INGREDIENTS**

Distinction of Substance  
or Mixture

Mixture

Chemical Name or Generic Name	Concentration or Its Ranges	Formula	ENCs No./ISHL No.		CAS RN
			ENCs No.	ISHL No.	
Ethylene glycol	7.5%	HOCH <sub>2</sub> CH 2OH	(2)-230	Existing	107-21-1
Glycerol	7.5%	CH <sub>2</sub> OHCH (OH)C H <sub>2</sub> OH	(2)-242	Existing	56-81-5
Aluminum	2.64%	Al	Unknown	Unknown	7429-90-5
Propylenglycol mono methylether	1.425%		(2)- 404,(7)-97	Existing	107-98-2

Impurities and/or  
Stabilizing Additives which  
Contribute to the

No information available

**Section 4 – FIRST AID MEASURES**

Inhalation

Get medical advice and attention if you feel unwell.

Skin Contact  
Eye Contact

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

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, CO<sub>2</sub>, water spray or regular foam.

**Section 6 – ACCIDENTAL RELEASE MEASURES**

<p>Environmental Precautions</p>	<p>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.</p>
<p>Methods and Equipment for Containment and Cleaning up</p>	<p>Vacuum or sweep up material and place in a disposal container.</p> <p>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.</p>
<p>Prevention Measures for Secondary Accidents</p>	<p>Prevent flowing into drain, sewage, basement, and closed area.</p> <p>Remove thoroughly since the smooth and slippery surface will be formed on the floor.</p>

**Section 7 – HANDLING AND STORAGE**

<p>Handling</p>	<p>Technical Measures</p>	<p>Provide ventilation system and use necessary personal protective equipment as described in "Section 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION".</p>
	<p>Precautions for Safe Handling</p>	<p>Wash hand thoroughly after handling.</p> <p>Avoid swallowing. Avoid contact with eyes. Protect from high temperature and direct sunlight.</p>
	<p>Prevents Handling of Incompatible Substances or Mixtures</p>	<p>Refer to "Section 10 – STABILITY AND REACTIVITY".</p>
<p>Storage Precautionary Statements</p>	<p>Conditions for Safe Storage</p>	<p>Refer to "Section 10 – STABILITY AND REACTIVITY".</p> <p>Have containers keep away from direct sunlight and heat. Keep away from heat.</p>

**Section 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION**

<p>Engineering Controls</p>		<p>Good general ventilation should be sufficient to control airborne levels.</p>
<p>Personal Protective Equipment</p>	<p>Respiratory Protection</p> <p>Hand Protection</p> <p>Eye Protection</p> <p>Skin and Body Protection</p>	<p>Use personal respiratory equipment as required.</p> <p>Use personal gloves as required.</p> <p>Use personal eye protection as required.</p> <p>Use personal protective clothing and face protection as required.</p>

**Section 9 – PHYSICAL AND CHEMICAL PROPERTIES**

<p>Appearance</p>	<p>Physical State</p> <p>Form</p> <p>Colour</p>	<p>liquid</p> <p>liquid (viscous liquid)</p> <p>gold</p>
<p>Odour</p>		<p>slight odor</p>
<p>Odour threshold</p>		<p>No data available</p>
<p>pH</p>		<p>No data available</p>
<p>Melting Point/Freezing Point</p>		<p>No data available</p>
<p>Initial Boiling Point and Boiling Ranges</p>		<p>No data available</p>

Flash Point		No data available
Evaporation Rate		No data available
Flammability (solid, gas)		No data available
Flammability or Explosive Limits	Lower Limit	No data available
	Upper Limit	No data available
Vapour Pressure		No data available
Vapour Density		No data available
Specific Gravity (Density)		No data available
Partition Coefficient : n-Octanol/Water		No data available
Auto-Ignition Temperature		No data available
Decomposition Temperature		No data available
Viscosity		No data available
Kinematic viscosity		No data available

#### Section 10 – STABILITY AND REACTIVITY

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

#### Section 11 – TOXICOLOGICAL INFORMATION

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

#### Section 12 – ECOLOGICAL INFORMATION

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

#### Section 13 – DISPOSAL CONSIDERATIONS

Residual Waste		Disposal should be in accordance with applicable regulations and standards by the respective local governments.
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Contaminated Container and Packaging	Commission a waste disposal company, or a local public body who are licensed by local or regional government, to dispose of the material. Recycle containers after cleansing, or carry out the disposal under the related laws and regulations and the standards of the local governments.
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**Section 14 – TRANSPORT INFORMATION**

International Regulations	Regulatory Information by Sea Marine Pollutant Transport in bulk according to MARPOL 73/78, Annex II ,and the IBC code	Not applicable
Regulations in Japan	Regulatory Information by Air Regulatory 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 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.
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## Safety Data Sheet (SDS)

Preparation Date 2017/12/12

## Section 1 – CHEMICALS AND COMPANY IDENTIFICATION

Chemical Identifier WPB20-Z  
 Product Code WPB20Z0002  
 Company Name PENTEL CO., LTD.  
 Address 7-2,KOAMICHO,NIHONBASHI,CHUO-KU,TOKYO  
 Company Contact QUALITY ASSURANCE DEPARTMENT I  
 Phone Number 03-5695-7210  
 Fax Number 03-5645-8204  
 Mail Address hinpo@pentel.co.jp  
 Emergency Phone Number 03-5695-7210  
 Recommended Use and Restriction on Use ink  
 K108-Z, K118-Z, KF8-Z, BG208-Z, K230-Z, KFR10-Z, WPB7-Z

## Section 2 – HAZARDS IDENTIFICATION

## GHS Classification

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

## GHS Label Elements

## Symbols



Signal Word Danger  
 Hazard Statements H315 Causes skin irritation  
 H319 Causes serious eye irritation  
 H332 Harmful if inhaled  
 H370 Causes damage to blood,kidney,central nervous system  
 H373 May cause damage to lung through prolonged or repeated exposure  
 Precautionary Statements  
 Prevention Avoid breathing dust and fume.(P261)  
 Precautionary Statements  
 Wear protective gloves.(P280)  
 Wear eye protection and face protection.(P280)  
 Do not breathe mist, vapours and spray.(P260)  
 Avoid breathing mist, vapours and spray.(P261)

<p>Response Precautionary Statements</p>	<p>Wash hand 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) IF ON SKIN: Wash with plenty of soap and water.(P302+P352)  If skin irritation occurs: Get medical advice and attention.(P332+P313) Take off contaminated clothing and wash it before reuse.(P362+P364) IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.(P304+P340) 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) Call a doctor if you feel unwell.(P312) Get medical advice and attention if you feel unwell.(P314) Specific treatment.(P321) If eye irritation persists: Get medical advice and attention.(P337+P313) Store locked up.(P405)</p>
<p>Storage Precautionary Statements Disposal Precautionary Statements</p>	<p>Dispose of contents and container in accordance with local, regional and national regulations (to be specified).(P501)</p>

Section 3 – COMPOSITION / INFORMATION ON INGREDIENTS

Distinction of Substance or Mixture	Mixture
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Chemical Name or Generic Name	Concentration or Its Ranges	Formula	ENCs No./ISHL No.		CAS RN
			ENCs No.	ISHL No.	
Ethylene glycol	10%	HOCH <sub>2</sub> CH 2OH	(2)-230	Existing	107-21-1
Glycerin	10%	CH <sub>2</sub> OHCH (OH)C H <sub>2</sub> OH	(2)-242	Existing	56-81-5
Aluminum	2.7%	Al	Unknown	Unknown	7429-90-5
Propylene glycol monomethyl ether	1.35%		(2)- 404,(7)-97	Existing	107-98-2

Impurities and/or Stabilizing Additives which Contribute to the	No information available
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Section 4 – FIRST AID MEASURES

Inhalation	Get medical advice and attention if you feel unwell.
Skin Contact	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. Get medical advice and attention if you feel unwell.

**Section 5 – FIRE FIGHTING MEASURES**  
Extinguishing Media

Small fires: Dry chemical, CO2, water spray or regular foam.

**Section 6 – ACCIDENTAL RELEASE MEASURES**  
Environmental Precautions

Pay attention not to cause the influence on the environment by discharging into rivers. This product is water pollutant and should be prevented from contaminating soil or from entering sewage and drainage systems and bodies of water. Vacuum or sweep up material and place in a disposal container.

Methods and Equipment for Containment and Cleaning up

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

Prevention Measures for Secondary Accidents

Prevent flowing into drain, sewage, basement, and closed area. Remove thoroughly since the smooth and slippery surface will be formed on the floor.

**Section 7 – HANDLING AND STORAGE**  
Handling

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

Precautions for Safe Handling Wash hand thoroughly after handling.

Avoid swallowing. Avoid contact with eyes. Protect from high temperature and direct sunlight.

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

Storage Precautionary Statements

Conditions for Safe Storage Refer to "Section 10 – STABILITY AND REACTIVITY". Have containers keep away from direct sunlight and heat. Keep away from heat.

**Section 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION**  
Engineering Controls

Good general ventilation should be sufficient to control airborne levels.

Personal Protective Equipment

Respiratory Protection Use personal respiratory equipment as required.

Hand Protection Use personal gloves as required.

Eye Protection Use personal eye protection as required.



Skin and Body  
Protection

Use personal protective clothing and face  
protection as required.

## Section 9 – PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Physical State	liquid
	Form	liquid (viscous liquid)
	Colour	silver
Odour		slight odor
Odour threshold		No data available
pH		No data available
Melting Point/Freezing Point		No data available
Initial Boiling Point and Boiling Ranges		No data available
Flash Point		No data available
Evaporation Rate		No data available
Flammability (solid, gas)		No data available
Flammability or Explosive Limits	Lower Limit	No data available
	Upper Limit	No data available
Vapour Pressure		No data available
Vapour Density		No data available
Specific Gravity (Density)		No data available
Partition Coefficient : n- Octanol/Water		No data available
Auto-Ignition		No data available
Decomposition Temperature		No data available
Viscosity		No data available
Kinematic viscosity		No data available

## Section 10 – STABILITY AND REACTIVITY

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

## Section 11 – TOXICOLOGICAL INFORMATION

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

**Section 12 – ECOLOGICAL INFORMATION**

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

**Section 13 – DISPOSAL CONSIDERATIONS**

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

**Section 14 – TRANSPORT INFORMATION**

International Regulations	Regulatory Information by Sea	Not applicable
	Marine Pollutant Transport in bulk according to MARPOL 73/78, Annex II, and the IBC code	Not applicable
	Regulatory Information by Air	Not applicable
Regulations in Japan	Regulatory Information by Road or Rail	Not applicable
	Regulatory Information by Sea	Not applicable
	Marine Pollutant Transport in bulk according to MARPOL 73/78, Annex II, and the IBC code	Not applicable
	Regulatory Information by Air	Not applicable
Emergency Response Guide Number		Not applicable

**Section 15 – REGULATORY INFORMATION**

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

**Section 16 – OTHER INFORMATION**

Information Contact	No information available
Other Property	This information is furnished without warranty express or implied. This information is believed to be accurate to the best knowledge of PENTEL Co., Ltd. but not assumes legal responsibility for use of or reliance upon this information.