#### Safety Data Sheet (SDS)

Preparation Date 2018/10/29

## Section 1 - CHEMICALS AND COMPANY IDENTIFICATION

Chemical Identifier OPB11-A Product Code OPB11A0002 Company Name PENTEL CO., LTD. 7-2,KOAMICHO,NIHONBASHI,CHUO-KU,TOKYO Address Company Contact QUALITY ASSURANCE DEPARTMENT I Phone Number 03-5695-7210 Fax Number 03-5645-8204 Mail Address hinpo@pentel.co.jp 03-5695-7210 **Emergency Phone** Number **Recommended Use** ink and Restriction on Use (X)BXM7H-A,XBXS7-A,XBXS7J-A,XBXS5J-A,XKBXES7-A, BX107A-A, BX157-A Section 2 - HAZARDS IDENTIFICATION **GHS** Classification Health Hazards Acute toxicity (Inhalation: vapour) Category 4 Skin corrosion/irritation Category 2 Serious eye damage/eye irritation Category 2A Carcinogenicity Category 2 Reproductive toxicity Category 1B Specific target organ toxicity (single exposure) Category 1(liver,blood,kidney,spleen) Specific target organ toxicity (single exposure) Category 2(central nervous system) Specific target organ toxicity (single exposure) Category 3(narcotic effect) Specific target organ toxicity (repeated exposure) Category 1(blood)

**GHS** Label Elements

Symbols



Signal Word Hazard Statements

Danger s H226 Flammable liquid and vapour H315+H320 Causes skin and eye irritation H332 Harmful if inhaled H336 May cause drowsiness or dizziness H351 Suspected of causing cancer H360 May damage fertility or the unborn child H370 Causes damage to liver,blood,kidney,spleen H373 May cause damage to respiratory apparatus through prolonged or repeated exposure

Specific target organ toxicity (repeated exposure)

Other hazards than mentioned above are Not applicable or Classification not possible.

Category 2(respiratory apparatus)

Precautionary Statements Prevention Precautionary Statements	Avoid breathing gas.(P261)
	Avoid breathing mist, vapours and spray.(P261)
	Avoid breathing dust and fume.(P261) Wash hand thoroughly after handling.(P264)
	Wash eye thoroughly after handling.(P204)
	Do not eat, drink or smoke when using this product.(P270)
	Use only outdoors or in a well-ventilated area.(P271)
	Wear protective gloves.(P280)
Response Precautionary Statements	IF ON SKIN: Wash with plenty of soap and water.(P302+P352)
Statements	If skin irritation or rash occurs, get medical advice and attention.(P333+P313)
	Get medical advice and attention if you feel unwell.(P314)
	IF IN EYES: Rinse cautiously with water for
	several minutes. Remove contact lenses, if
	present and easy to do. Continue
	rinsing.(P305+P351+P338) If eye irritation persists: Get medical advice and
	attention.(P337+P313)
	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for
	breathing.(P304+P340)
_	
Precautionary Statements	
Dianaasl	
-	
Statements	specified).(P501)
Disposal Precautionary	in a position comfortable for breathing.(P304+P340) Store in a well-ventilated place keeping container tightly closed.(P403+P233) Store locked up.(P405) Dispose of contents and container in accordance with local, regional and national regulations (to be

Section 3 – COMPOSITION / INFORMATION ON INGREDIENTS Distinction of Substance Mixture

or Mixture					
Chemical Name or	Concentration or Its	Formula	ENCS No.	/ISHL No.	CAS RN
Generic Name	Ranges	i orniula	ENCS No.	ISHL No.	UAS KN
CarbonBlack(C. I. Pig ment Black7)	5.5%	Unknown	Unknown	Unknown	1333-86-4
Ethylene glycol mon oisopropyl ether	15.65%	Unknown	(2)-410	Existing	109-59-1
2-phenoxyethanol	15%	Unknown	(3)-558 (7)-78 (9)-1277	Existing	122-99-6
2-(2-Methoxyethox y)ethanol	19.29%	Unknown	(2)-422 (2)-2979 (7)-97	Existing	111-77-3

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

Section 4 - FIRST AID MEASURES

Inhalation	Remove person to fresh air and keep comfortable for breathing. Get medical advice and attention if you feel unwell.
Skin Contact	Wash with plenty of soap and water. If skin irritation or rash occurs, get medical advice and attention.
Eye Contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. When the ocular stimulation lasts, Seek medical
Ingestion	treatment and advice. Rinse mouth. Do NOT induce vomiting. Get medical advice and attention if you feel unwell.
Section 5 – FIRE FIGHTING MEASURES	
Extinguishing Media Unsuitable Extinguishing Media	Dry chemicals, CO2, fog, sand or regular foam. Straight streams.
Protection of Fire Fighter	In fire fighting, wear respiratory protection and chemical protective clothing.
Section 6 – ACCIDENTAL RELEASE MEASURES Personal Precautions, Protective Equipment and Emergency Procedures	Keep unauthorized personnel away.
Environmental	Do not touch or walk through spilled material. Stay upwind. Ventilate closed spaces before entering. Wear appropriate personal protective equipment (Refer to "Section 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION") and avoid inhalation or contact with eyes and skin. Do not release into the environment. Pay attention not to cause the influence on the environment by discharging into rivers. This product is water pollutant and should be
Methods and Equipment for Containment and Cleaning up	prevented from contaminating soil or from entering sewage and drainage systems and bodies of water. Stop leak if you can do it without risk.
Prevention Measures for Secondary Accidents	Small spills; absorb or cover with dry earth, sand or other non-combustible material and transfer to containers. Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container. Large spills; prevent flowing out with a dike and collect it at a safe place. Remove thoroughly since the smooth and slippery surface will be formed on the floor. After removal, flush contaminated area thoroughly with water. Removes all ignition sources promptly. (Prohibition of smoking, sparks, and flames in the surrounding area). 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 Precautions for Safe	Provide ventilation system and use necessary personal protective equipment as described in "Section 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION". Avoid breathing gas.
	Handling	Avoid breathing mist, vapours and spray. Avoid breathing dust and fume. Wash hand thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Do not contact, breathe or swallow.
	Prevents Handling of Incompatible Substances or Mixtures	Refer to "Section 10 - STABILITY AND REACTIVITY".
	Specific Hygiene Measures	Wash hand thoroughly after handling.
Storage Precautionary Statements	Conditions for Safe Storage	Refer to "Section 10 - STABILITY AND REACTIVITY". Store in a well-ventilated place keeping container tightly closed. Have containers keep away from direct sunlight and heat.
	Material Used in Packaging/Container s	Store locked up. Packaging materials and containers are not legislated, but use sturdy and closed-type containers.
Section 8 – EXPOSURE CON Engineering Controls	TROLS / PERSONAL	PROTECTION Take precautionary measures against static discharge. Good general ventilation should be sufficient to control airborne levels.
Personal Protective Equipment	Respiratory Protection Hand Protection Eye Protection Skin and Body	Use personal respiratory equipment as required. Wear protective gloves. Use personal eye protection as required. Use personal protective clothing and face
	Protection	protection as required.
Section 9 - PHYSICAL AND ( Appearance	CHEMICAL PROPERT Physical State Form Colour	IES liquid liquid black
Odour Odour threshold pH		A characteristic odor makes it small. No data available No data available
Melting Point/Freezing Point Initial Boiling Point and		No data available No data available
Boiling Ranges Flash Point		No data available
Evaporation Rate		No data available

Flammability (solid, gas) Flammability or Explosive Limits	Lower Limit	No data available No data available
Linits	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 avaliable
		No data available
Auto-Ignition		No data available
Decomposition		no data avallable
Temperature		
Viscosity		No data available
Kinematic viscosity		No data available
Section 10 - STABILITY AND	REACTIVITY	
Reactivity		No data available
Chemical stability		No data available
Possibility of Hazardous		No data available
Reaction		
Conditions to Avoid		No data available
Incompatible Substances		No data available
or Mixtures		
Hazardous Decomposition		No data available
Products		
Section 11 - TOXICOLOGICA Acute Toxicity Skin Corrosion/Irritation Serious eye damage/eye irritation Respiratory Sensitization Skin Sensitization Germ Cell Mutagenicity Carcinogenicity Reproductive Toxicity Specific target organ toxicity (single exposure) Specific target organ toxicity (repeated exposure) Aspiration Hazard	L INFORMATION	No information available No data available
Section 12 - ECOLOGICAL IN	IFURMATION	No data available
Hazardous to the aquatic		No data available
environment (acute)		NI I
Hazardous to the aquatic		No data available
environment (long-term)		<b>NI I. 11</b>
Hazardous to the ozone		No data available
layer		
Section 13 - DISPOSAL CON	SIDERATIONS	
Residual Waste		Disposal should be in ac regulations and standard

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.

	When commissioning the disposal to a disposal company, notify the danger and toxicity thoroughly to the company. Do not release waste liquid containing the product and used water for cleansing into rivers, etc., or do not discharge the concerned wastes intact for reclamation.
Contaminated Container and Packaging	Recycle containers after cleansing, or carry out the disposal under the related laws and regulations and the standards of the local governments. In case of disposal of empty containers, remove the content thoroughly.

## Section 14 - TRANSPORT INFORMATION

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

#### Section 15 - REGULATORY INFORMATION

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

Section 16 – OTHER INFORMATION Information Contact Other Property No information available This information is furnished without warranty express or implied. This information is believed to be accurate to the best knowledge of PENTEL Co., Ltd. but not assumes leagal responsibility for use of or reliance upon this information.

# Safety Data Sheet (SDS)

		Preparation Date 2015/04/02 Revision Date 2018/10/29
Section 1 – CHEMICALS AND	COMPANY IDENTIF Chemical Identifier Product Code Company Name Address Company Contact Phone Number Fax Number Mail Address Emergency Phone Number Recommended Use and Restriction on Use	
Section 2 - HAZARDS IDENT GHS Classification	IFICATION	
GHS Label Elements	Health Hazards	Acute toxicity (Inhalation: vapour) Category 4 Skin corrosion/irritation Category 2 Serious eye damage/eye irritation Category 2A Specific target organ toxicity (single exposure) Category 1(liver,blood,kidney,spleen) Specific target organ toxicity (single exposure) Category 2(central nervous system) Specific target organ toxicity (single exposure) Category 3(narcotic effect) Specific target organ toxicity (repeated exposure) Category 1(blood) Other hazards than mentioned above are Not applicable or Classification not possible.
	Symbols	A A
	Signal Word Hazard Statements	Danger H315 Causes skin irritation H319 Causes serious eye irritation H332 Harmful if inhaled H371 May cause damage to central nervous system H372 Causes damage to blood through prolonged or repeated exposure H336 May cause drowsiness or dizziness H370 Causes damage to liver,blood,kidney,spleen
	Precautionary Statements	
	Prevention Precautionary Statements	Avoid breathing gas.(P261)
		Avoid breathing mist, vapours and spray.(P261)

Response Precautionary Statements	Avoid breathing dust and fume.(P261) 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) Wear protective gloves.(P280) IF ON SKIN: Wash with plenty of soap and water.(P302+P352)
	If skin irritation or rash occurs, get medical advice and attention.(P333+P313)
	Get medical advice and attention if you feel unwell.(P314)
	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 eye irritation persists: Get medical advice and attention.(P337+P313)
Storage	Store in a well-ventilated place keeping container
Precautionary Statements	tightly closed.(P403+P233)
	Store locked up.(P405)
Disposal Precautionary Statements	Dispose of contents and container in accordance with local, regional and national regulations (to be
Statements	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.	CAS RN
Generic Name	Ranges	i orniula	ENCS No.	ISHL No.	UAS NN
Ethylene glycol mon oisopropyl ether	27.06%	Unknown	(2)-410	Existing	109-59-1
2—phenoxyethanol	30.23%	Unknown	(3)-558 (7)-78 (9)-1277	Existing	122-99-6
2-(2-Methoxyethox y)ethanol	0.18%	Unknown	(2)-422 (2)-2979 (7)-97	Existing	111-77-3

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.

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

Skin Contact

Eye Contact Ingestion	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. When the ocular stimulation lasts, Seek medical treatment and advice. Rinse mouth. Do NOT induce vomiting. Get medical advice and attention if you feel unwell.
Section 5 – FIRE FIGHTING MEASURES Extinguishing Media Unsuitable Extinguishing Media Protection of Fire Fighter	Dry chemicals, CO2, fog, sand or regular foam. Straight streams. In fire fighting, wear respiratory protection and chemical protective clothing.
Section 6 – ACCIDENTAL RELEASE MEASURES Personal Precautions, Protective Equipment and Emorganay Proceedures	Keep unauthorized personnel away.
Emergency Procedures Environmental Methods and Equipment for Containment and Cleaning up	Do not touch or walk through spilled material. Stay upwind. Ventilate closed spaces before entering. Wear appropriate personal protective equipment (Refer to "Section 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION") and avoid inhalation or contact with eyes and skin. Do not release into the environment. 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. Stop leak if you can do it without risk.
Prevention Measures for Secondary Accidents	<ul> <li>Small spills; absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.</li> <li>Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container.</li> <li>Large spills; prevent flowing out with a dike and collect it at a safe place.</li> <li>After removal, flush contaminated area thoroughly with water.</li> <li>Removes all ignition sources promptly. (Prohibition of smoking, sparks, and flames in the surrounding area).</li> <li>Prevent flowing into drain, sewage, basement, and closed area.</li> <li>Remove thoroughly since the smooth and slippery surface will be formed on the floor.</li> </ul>
Section 7 - HANDLING AND STORAGE Handling Technical Measures	Provide ventilation system and use necessary personal protective equipment as described in "Section 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION".

	Precautions for Safe Handling	Avoid breathing gas.
	5	Avoid breathing mist, vapours and spray. Avoid breathing dust and fume.
		Wash hand thoroughly after handling. Do not eat, drink or smoke when using this product.
		Use only outdoors or in a well-ventilated area. Do not contact, breathe or swallow.
	Prevents Handling of Incompatible Substances or	Refer to "Section 10 - STABILITY AND REACTIVITY".
	Mixtures Specific Hygiene	Wash hand thoroughly after handling.
Storage Precautionary Statements	Measures Conditions for Safe Storage	Refer to "Section 10 - STABILITY AND REACTIVITY".
	5	Store in a well-ventilated place keeping container tightly closed.
		Have containers keep away from direct sunlight and heat. Store locked up.
	Material Used in	Packaging materials and containers are not
	Packaging/Container s	legislated, but use sturdy and closed-type containers.
Section 8 - EXPOSURE CON	TROLS / PERSONAL	PROTECTION
Engineering Controls		Take precautionary measures against static discharge.
		Good general ventilation should be sufficient to control airborne levels.
Personal Protective Equipment	Respiratory Protection	Use personal respiratory equipment as required.
	Hand Protection	Wear protective gloves.
	Eye Protection Skin and Body	Use personal eye protection as required. Use personal protective clothing and face
	Protection	protection as required.
Section 9 - PHYSICAL AND (		ES
Appearance	Physical State	liquid
	Form Colour	liquid
Odour	Golour	red characteristic
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 Flammability (solid, gas)		No data available No data available
Flammability or Explosive Limits	Lower Limit	No data available
	Upper Limit	No data available
Vapour Pressure		No data available
Vapour Density Specific Gravity (Density)		No data available No data available
opcome dravity (Density)		

Partition Coefficient : n- Octanol/Water	No data available
Auto-Ignition	No data available
Decomposition	No data available
Temperature	
Viscosity	No data available
Kinematic viscosity	No data available
Kinematic viscosity	NU Uata available
Section 10 - STABILITY AND REACTIVITY	
Reactivity	No data available
Chemical stability	No data available
Possibility of Hazardous	No data available
Reaction	
Conditions to Avoid	No data available
Incompatible 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 Sensitization	No data available
Skin Sensitization	No data available
Germ Cell Mutagenicity	No data available
	No data available
Carcinogenicity	
Reproductive Toxicity	No data available
Specific target organ	No data available
toxicity (single exposure)	NI 1
Specific target organ	No data available
toxicity (repeated	
exposure)	
Aspiration Hazard	No data available
Section 12 - ECOLOGICAL INFORMATION	
Hazardous to the aquatic	No data available
environment (acute)	
Hazardous to the aquatic	No data available
environment (long-term)	
Hazardous to the ozone	No data available
layer	NO GALA AVAIIADIO
iayti	
Section 13 - DISPOSAL CONSIDERATIONS	
Residual Waste	Disposal should be in ac
	regulations and standard

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. When commissioning the disposal to a disposal

company, notify the danger and toxicity thoroughly to the company.

Do not release waste liquid containing the product and used water for cleansing into rivers, etc., or do not discharge the concerned wastes intact for reclamation.

Contaminated Container and Packaging		Recycle containers after cleansing, or carry out the disposal under the related laws and regulations and the standards of the local governments. In case of disposal of empty containers, remove the content thoroughly.
Section 14 - TRANSPORT IN	IFORMATION	
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 according to	Not applicable
	MARPOL	
	73∕78,Annex Ⅱ,and	
	the IBC code	
	Regulatory	Not applicable
	Information by Air	N . P . I .
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 2015/04/02 Revision Date 2018/10/29

## Section 1 - CHEMICALS AND COMPANY IDENTIFICATION

Chemical Identifier OPB11-C Product Code OPB11C0002 Company Name PENTEL CO., LTD. 7-2,KOAMICHO,NIHONBASHI,CHUO-KU,TOKYO Address Company Contact QUALITY ASSURANCE DEPARTMENT I 03-5695-7210 Phone Number 03-5645-8204 Fax Number Mail Address hinpo@pentel.co.jp Emergency Phone 03-5695-7210 Number Recommended Use ink and Restriction on Use (X)BXM7H-C,(X)BXS7-C BX107C-C, BX157-C

## Section 2 – HAZARDS IDENTIFICATION GHS Classification

SILICATION		
	Health Hazards	Acute toxicity (Inhalation: vapour) Category 4 Serious eye damage/eye irritation Category 2A Reproductive toxicity Category 1B Specific target organ toxicity (single exposure) Category 2(liver,blood,kidney,spleen) Specific target organ toxicity (single exposure) Category 3(narcotic effect) Specific target organ toxicity (repeated exposure) Category 2(blood) Other hazards than mentioned above are Not applicable or Classification not possible.

#### **GHS Label Elements**

Symbols



Signal Word Hazard Statements	Danger H319 Causes serious eye irritation H373 May cause damage to blood through prolonged or repeated exposure H332 Harmful if inhaled H336 May cause drowsiness or dizziness H360 May damage fertility or the unborn child H371 May cause damage to liver,blood,kidney,spleen
Precautionary Statements Prevention Precautionary Statements	Avoid breathing gas.(P261)
	Avoid breathing mist, vapours and spray.(P261) Avoid breathing dust and fume.(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) Wear protective gloves.(P280) IF ON SKIN: Wash with plenty of soap and water.(P302+P352)
	If skin irritation or rash occurs, get medical advice and attention.(P333+P313)
	Get medical advice and attention if you feel unwell.(P314)
	IF IN EYES: Rinse cautiously with water for
	several minutes. Remove contact lenses, if
	present and easy to do. Continue rinsing.(P305+P351+P338)
	If eye irritation persists: Get medical advice and attention.(P337+P313)
	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for
	breathing.(P304+P340)
Storage	Store in a well-ventilated place keeping container
Precautionary Statements	tightly closed.(P403+P233)
Statements	Store locked up.(P405)
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

or Mixture Concentration or Its Chemical Name or ENCS No./ISHL No. CAS RN Formula ENCS No. ISHL No. Generic Name Ranges C. I. SOLVENT BLUE 0.86% Unknown Unknown Unknown 1328-51-4 38 3.84% (2) - 410Ethylene glycol mon Unknown Existing 109-59-1 oisopropyl ether 2-phenoxyethanol 13.97% Unknown (3) - 558122-99-6 Existing (7) - 78(9)-1277 2-(2-Methoxyethox 39.12% Unknown (2)-422 111-77-3 Existing y)ethanol (2) - 2979(7)-97

Mixture

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.

Wash with plenty of soap and water.

If skin irritation or rash occurs, get medical advice and attention.

Skin Contact

Eye Contact Ingestion	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. When the ocular stimulation lasts, Seek medical treatment and advice. Rinse mouth. Do NOT induce vomiting. Get medical advice and attention if you feel unwell.
Section 5 – FIRE FIGHTING MEASURES Extinguishing Media Unsuitable Extinguishing Media Protection of Fire Fighter	Dry chemicals, CO2, fog, sand or regular foam. Straight streams. In fire fighting, wear respiratory protection and chemical protective clothing.
Section 6 – ACCIDENTAL RELEASE MEASURES Personal Precautions, Protective Equipment and Emergency Procedures	Keep unauthorized personnel away.
	Do not touch or walk through spilled material. Stay upwind. Ventilate closed spaces before entering. Wear appropriate personal protective equipment (Refer to "Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION") and avoid inhalation or contact with eyes and skin.
Environmental	Do not release into the environment. Pay attention not to cause the influence on the environment by discharging into rivers. This product is water pollutant and should be prevented from contaminating soil or from entering sewage and drainage systems and bodies of water.
Methods and Equipment for Containment and Cleaning up	Stop leak if you can do it without risk.
Prevention Measures for Secondary Accidents	<ul> <li>Small spills; absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.</li> <li>Absorb spill with inert material (e.g., dry sand or earth), then place in a chemical waste container.</li> <li>Large spills; prevent flowing out with a dike and collect it at a safe place.</li> <li>Remove thoroughly since the smooth and slippery surface will be formed on the floor.</li> <li>After removal, flush contaminated area thoroughly with water.</li> <li>Removes all ignition sources promptly. (Prohibition of smoking, sparks, and flames in the surrounding area).</li> <li>Do not get water inside containers.</li> <li>Prevent dispersion by covering with plastic sheets.</li> <li>Prevent flowing into drain, sewage, basement, and closed area.</li> </ul>

Section 7 - HANDLING AND STORAGE

Handling	Technical Measures	Provide ventilation system and use necessary personal protective equipment as described in "Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION".
	Precautions for Safe	
	Handling	
		Avoid breathing mist, vapours and spray.
		Avoid breathing dust and fume. Wash hand thoroughly after handling.
		Do not eat, drink or smoke when using this
		product.
		Use only outdoors or in a well-ventilated area.
	Prevents Handling of	Do not contact, breathe or swallow. Refer to ″Section 10 - STABILITY AND
	Incompatible	REACTIVITY".
	Substances or	
	Mixtures	
	Specific Hygiene Measures	Wash hand thoroughly after handling.
Storage Precautionary	Conditions for Safe	Refer to "Section 10 - STABILITY AND
Statements	Storage	REACTIVITY".
		Have containers keep away from direct sunlight
		and heat. Store in a well-ventilated place keeping container
		tightly closed.
		Store locked up.
	Material Used in	Packaging materials and containers are not
		legislated, but use sturdy and closed-type containers.
	S	Containers.
Section 8 - EXPOSURE CON	ITROLS / PERSONAL	PROTECTION
Section 8 - EXPOSURE CON Engineering Controls	ITROLS / PERSONAL	Take precautionary measures against static
	ITROLS / PERSONAL	Take precautionary measures against static discharge.
	ITROLS / PERSONAL	Take precautionary measures against static discharge. Good general ventilation should be sufficient to
	ITROLS / PERSONAL Respiratory	Take precautionary measures against static discharge.
Engineering Controls	Respiratory Protection	Take precautionary measures against static discharge. Good general ventilation should be sufficient to control airborne levels. Use personal respiratory equipment as required.
Engineering Controls Personal Protective	Respiratory Protection Hand Protection	Take precautionary measures against static discharge. Good general ventilation should be sufficient to control airborne levels. Use personal respiratory equipment as required. Wear protective gloves.
Engineering Controls Personal Protective	Respiratory Protection Hand Protection Eye Protection	Take precautionary measures against static discharge. Good general ventilation should be sufficient to control airborne levels. Use personal respiratory equipment as required. Wear protective gloves. Use personal eye protection as required.
Engineering Controls Personal Protective	Respiratory Protection Hand Protection	Take precautionary measures against static discharge. Good general ventilation should be sufficient to control airborne levels. Use personal respiratory equipment as required. Wear protective gloves.
Engineering Controls Personal Protective Equipment	Respiratory Protection Hand Protection Eye Protection Skin and Body Protection	Take precautionary measures against static discharge. Good general ventilation should be sufficient to control airborne levels. Use personal respiratory equipment as required. Wear protective gloves. Use personal eye protection as required. Use personal protective clothing and face protection as required.
Engineering Controls Personal Protective Equipment Section 9 - PHYSICAL AND	Respiratory Protection Hand Protection Eye Protection Skin and Body Protection CHEMICAL PROPERT	Take precautionary measures against static discharge. Good general ventilation should be sufficient to control airborne levels. Use personal respiratory equipment as required. Wear protective gloves. Use personal eye protection as required. Use personal protective clothing and face protection as required.
Engineering Controls Personal Protective Equipment	Respiratory Protection Hand Protection Eye Protection Skin and Body Protection CHEMICAL PROPERT Physical State	Take precautionary measures against static discharge. Good general ventilation should be sufficient to control airborne levels. Use personal respiratory equipment as required. Wear protective gloves. Use personal eye protection as required. Use personal protective clothing and face protection as required. IES liquid
Engineering Controls Personal Protective Equipment Section 9 - PHYSICAL AND	Respiratory Protection Hand Protection Eye Protection Skin and Body Protection CHEMICAL PROPERT	Take precautionary measures against static discharge. Good general ventilation should be sufficient to control airborne levels. Use personal respiratory equipment as required. Wear protective gloves. Use personal eye protection as required. Use personal protective clothing and face protection as required.
Engineering Controls Personal Protective Equipment Section 9 - PHYSICAL AND Appearance Odour	Respiratory Protection Hand Protection Eye Protection Skin and Body Protection CHEMICAL PROPERT Physical State Form	Take precautionary measures against static discharge. Good general ventilation should be sufficient to control airborne levels. Use personal respiratory equipment as required. Wear protective gloves. Use personal eye protection as required. Use personal protective clothing and face protection as required. IES liquid liquid
Engineering Controls Personal Protective Equipment Section 9 - PHYSICAL AND Appearance Odour Odour threshold	Respiratory Protection Hand Protection Eye Protection Skin and Body Protection CHEMICAL PROPERT Physical State Form	Take precautionary measures against static discharge. Good general ventilation should be sufficient to control airborne levels. Use personal respiratory equipment as required. Wear protective gloves. Use personal eye protection as required. Use personal protective clothing and face protection as required. IES liquid liquid blue characteristic No data available
Engineering Controls Personal Protective Equipment Section 9 - PHYSICAL AND Appearance Odour Odour threshold pH	Respiratory Protection Hand Protection Eye Protection Skin and Body Protection CHEMICAL PROPERT Physical State Form	Take precautionary measures against static discharge. Good general ventilation should be sufficient to control airborne levels. Use personal respiratory equipment as required. Wear protective gloves. Use personal eye protection as required. Use personal protective clothing and face protection as required. IES liquid liquid blue characteristic No data available No data available
Engineering Controls Personal Protective Equipment Section 9 - PHYSICAL AND Appearance Odour Odour threshold pH Melting Point/Freezing	Respiratory Protection Hand Protection Eye Protection Skin and Body Protection CHEMICAL PROPERT Physical State Form	Take precautionary measures against static discharge. Good general ventilation should be sufficient to control airborne levels. Use personal respiratory equipment as required. Wear protective gloves. Use personal eye protection as required. Use personal protective clothing and face protection as required. IES liquid liquid blue characteristic No data available
Engineering Controls Personal Protective Equipment Section 9 - PHYSICAL AND Appearance Odour Odour threshold pH	Respiratory Protection Hand Protection Eye Protection Skin and Body Protection CHEMICAL PROPERT Physical State Form	Take precautionary measures against static discharge. Good general ventilation should be sufficient to control airborne levels. Use personal respiratory equipment as required. Wear protective gloves. Use personal eye protection as required. Use personal protective clothing and face protection as required. IES liquid liquid blue characteristic No data available No data available
Engineering Controls Personal Protective Equipment Section 9 - PHYSICAL AND Appearance Odour Odour threshold pH Melting Point/Freezing Point Initial Boiling Point and Boiling Ranges	Respiratory Protection Hand Protection Eye Protection Skin and Body Protection CHEMICAL PROPERT Physical State Form	Take precautionary measures against static discharge. Good general ventilation should be sufficient to control airborne levels. Use personal respiratory equipment as required. Wear protective gloves. Use personal eye protection as required. Use personal protective clothing and face protection as required. ISS liquid liquid blue characteristic No data available No data available No data available
Engineering Controls Personal Protective Equipment Section 9 - PHYSICAL AND Appearance Odour Odour threshold pH Melting Point/Freezing Point Initial Boiling Point and Boiling Ranges Flash Point	Respiratory Protection Hand Protection Eye Protection Skin and Body Protection CHEMICAL PROPERT Physical State Form	Take precautionary measures against static discharge. Good general ventilation should be sufficient to control airborne levels. Use personal respiratory equipment as required. Wear protective gloves. Use personal eye protection as required. Use personal protective clothing and face protection as required. IES liquid liquid blue characteristic No data available No data available No data available No data available
Engineering Controls Personal Protective Equipment Section 9 - PHYSICAL AND Appearance Odour Odour threshold pH Melting Point/Freezing Point Initial Boiling Point and Boiling Ranges Flash Point Evaporation Rate	Respiratory Protection Hand Protection Eye Protection Skin and Body Protection CHEMICAL PROPERT Physical State Form	Take precautionary measures against static discharge. Good general ventilation should be sufficient to control airborne levels. Use personal respiratory equipment as required. Wear protective gloves. Use personal eye protection as required. Use personal protective clothing and face protection as required. IES liquid liquid blue characteristic No data available No data available No data available No data available No data available
Engineering Controls Personal Protective Equipment Section 9 - PHYSICAL AND Appearance Odour Odour threshold pH Melting Point/Freezing Point Initial Boiling Point and Boiling Ranges Flash Point	Respiratory Protection Hand Protection Eye Protection Skin and Body Protection CHEMICAL PROPERT Physical State Form Colour	Take precautionary measures against static discharge. Good general ventilation should be sufficient to control airborne levels. Use personal respiratory equipment as required. Wear protective gloves. Use personal eye protection as required. Use personal protective clothing and face protection as required. IES liquid liquid blue characteristic No data available No data available No data available No data available
Engineering Controls Personal Protective Equipment Section 9 - PHYSICAL AND Appearance Odour Odour threshold pH Melting Point/Freezing Point Initial Boiling Point and Boiling Ranges Flash Point Evaporation Rate Flammability (solid, gas)	Respiratory Protection Hand Protection Eye Protection Skin and Body Protection CHEMICAL PROPERT Physical State Form Colour	Take precautionary measures against static discharge. Good general ventilation should be sufficient to control airborne levels. Use personal respiratory equipment as required. Wear protective gloves. Use personal eye protection as required. Use personal protective clothing and face protection as required. IES liquid liquid blue characteristic No data available No data available

Vapour Pressure Vapour Density	No data available No data available
Specific Gravity (Density) Partition Coefficient : n-	No data available No data available
Octanol/Water	No data available
Auto-Ignition Decomposition	No data available No data available
Temperature	
Viscosity	No data available
Kinematic viscosity	No data available
Section 10 - STABILITY AND REACTIVITY	
Reactivity	No data available
Chemical stability	No data available
Possibility of Hazardous	No data available
Reaction	Ne data available
Conditions to Avoid	No data available No data available
Incompatible Substances 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 Sensitization	No data available
Skin Sensitization	No data available
Germ Cell Mutagenicity	No data available
Carcinogenicity Reproductive Toxicity	No data available No data available
Specific target organ	No data available
toxicity (single exposure)	
Specific target organ	No data available
toxicity (repeated	
exposure)	
Aspiration Hazard	No data available
Section 12 – ECOLOGICAL INFORMATION	
Hazardous to the aquatic	No data available
environment (acute)	
Hazardous to the aquatic	No data available
environment (long-term)	NI 1. 111
Hazardous to the ozone	No data available
layer	
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.
	When commissioning the disposal to a disposal
	mion commissioning the disposal to a disposal

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

Contaminated ContainerRecycle containers after cleansing, or carry outand Packagingthe disposal under the related laws and regulations and the standards of the local governments.In case of disposal of empty containers, remove the content thoroughly.	and used water for cleansing into rivers, etc., or do not discharge the concerned wastes intact for reclamation.
	 the disposal under the related laws and regulations and the standards of the local governments. In case of disposal of empty containers, remove

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

#### Section 15 - REGULATORY INFORMATION

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

## Section 16 - OTHER INFORMATION

Information Contact Other Property No information available This information is furnished without warranty express or implied. This information is believed to be accurate to the best knowledge of PENTEL Co., Ltd. but not

Do not release waste liquid containing the product

assumes leagal responsibility for use of or reliance upon this information.