	<b>Safety Data Sheet</b>			Doc. No.	MSDS-004
				Initial Issue	Nov. 1996
				Revision Date	Jan. 2022
Substance name	Polytetramethylene Ether Glycol (PTMEG)				
CAS NO	KE NO	UN NO	EC NO		
25190-06-1	KE-20217				

### 1. Identification of the substance/mixture and of the company:

1.1 Substance Name	Polytetramethylene Ether Glycol (PTMEG)
1.2 Intended Use and Use Limitations	
Recommended Use	Raw Material for : spandex, elastomers, synthetic leathers, paints and coating materials.
Use Limitations	No Data Available
1.3 Company identification	
Company:	Korea PTG Co., Ltd.
Address:	15, Yongyeon-ro 179beon-gil, Nam-gu, Ulsan Korea
Tel, Number:	Tel 82-52-257-5240, Fax 82-52-257-5246
Emergency number:	82-52-257-5240
Team:	Safety & Environment Team

### 2. Hazard Identification:


2.1 Hazard-Risk classification	Not classified. However may be a slight irritation to the skin or eye depending on the experience of the person in manufacturing.
2.2 Label element, including and precautionary statements	
Hazard symbol	The product does not require a hazard warning label in accordance with GHS criteria.
Signal word	None
Hazard statement	Not assigned
Precautionary statement	Not assigned
2.3 Other hazard-Risk which are not included in the classification(NFPA)	
Health	0
Fire	1
Reactivity	0

### 3. Composition/Information on Ingredients:

Substance Name	Trivial name	CAS No.	Content(%)
Polytetramethylene Ether	Poly(oxytetramethylene) Glycol	25190-06-1	> 99.5

### 4. First aid measures:

4.1 In case of intrusion into eye	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
4.2 In case of skin contamination	Wash off with soap and plenty of water. Consult a physician. Launder contaminated clothing and shoes , before reuse.

	<b>Safety Data Sheet</b>	Doc. No.	MSDS-004
		Initial Issue	Nov. 1996
		Revision Date	Jul. 2019
Substance name	Polytetramethylene Ether Glycol (PTMEG)		

4.3 In case of respiratory

Remove victim to fresh area immediately.

Give artificial respiration as needed.

Consult with a doctor immediately.

4.4 In case of ingestion

Never give anything by mouth to an unconscious person.

Rinse mouth with water. Consult a physician.

4.5 Other notice of doctor

Follow your doctor to show safety health data.

## 5. Explosion, fire measures:

5.1 Suitable extinguishing media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Inappropriate extinguishing media

-

Major fire:

General fire extinguishing agent and use mist sprinkler

5.2 Specific hazards arising from the chemical

Heat decomposition product

Carbon oxides

Fire/Explosion hazard

There is a slight risk of fire. Dust/Air mixtures can ignite or explode.

5.3 Protective equipment and precaution for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

If safe to do so, remove containers from area of fire.

Prevent shatter using high-pressure water spray.

Dike for later disposal.

Avoid inhalation of Substance or combustion products.

Stay up wind and keep out of low areas.

## 6. Accidental release measures:

6.1 Personal precautions, protective equipment

Avoid inhalation of Substance or combustion products.

Wear personal protective equipment.

Do not touch the chemicals. Do not go across the chemicals.

Stop leak if possible without personal risk.

Do not contact/touch the Leakage Substance.

Do not pour water inside containers.

By spraying with water, reduce vapors

6.2 Environmental precautions

Absorb with sand or other non-combustible materials.


Do not let product enter drains.

6.3 Methods and materials for containment

Minor spills

Absorb it using nonflammable materials

(ex. dry sand or dirt)

	<b>Safety Data Sheet</b>	Doc. No.	MSDS-004
		Initial Issue	Nov. 1996
		Revision Date	Jul. 2019
Substance name	Polytetramethylene Ether Glycol (PTMEG)		

Major spills

Pick up and arrange disposal without creating dust.  
Sweep up and shovel. Keep in suitable, closed containers for disposal.  
Dike for later disposal.  
Remove the source of ignition.  
Keep in suitable, closed containers for disposal.

## 7. Handling and storage:

### 7.1 Precautions for safe handling

Avoid contact with skin and eyes.  
Provide appropriate exhaust ventilation at places where dust is formed.  
Clean the clothes after using chemical material.

### 7.2 Conditions for safe storage

Keep separated from with incompatible materials.  
Store in an airtight container.  
Keep container tightly closed in a dry and well-ventilated place.  
Comply with local regulations for storage.

## 8 Exposure controls/personal protection:

### 8.1 Exposure limits of chemical substance,

Domestic regulation

No Exposure Limits

ACGIH regulation

No Exposure Limits

Biological exposure limits

No Exposure Limits

### 8.2 Appropriate engineering controls

Provide local exhaust ventilation to control vapours/mists.

### 8.3 Individual protective equipment

Respiratory Protection

Not normally needed. Use adequate certified respirator if there is any potential for an uncontrolled release.

Eye protection

Wear safety glasses to avoid contact with eyes.

Hands protection

Wear appropriate protective gloves to avoid contact with skin.

Body protection:

Wear suitable protective clothing.

## 9. Physical and chemical properties:

9.1 Appearance (physical state, colour etc.)

Liquid to waxy, Colourless

9.2 Odour

Negligible

9.3 Odour threshold

No Data Available

9.4 pH

No Data Available

9.5 Melting point/freezing point


25 °C ~ 32 °C

9.6 Initial boiling point and boiling range

> 204 °C (> 398 °F)

9.7 Flash point

259 °C

	<b>Safety Data Sheet</b>	Doc. No.	MSDS-004
		Initial Issue	Nov. 1996
		Revision Date	Jul. 2019
Substance name	Polytetramethylene Ether Glycol (PTMEG)		


9.8 Evaporation rate	No Data Available
9.9 Flammability (solid, gas)	No Data Available
9.10 Upper/lower explosive limits	No Data Available
9.11 Vapour pressure	No Data Available
9.12 Solubility	Slightly soluble
9.13 Vapour density	No Data Available
9.14 Specific gravity	0.979 ( at 25 °C )
9.15 N-octanol/water partition coefficient	No Data Available
9.16 Auto-ignition temperature	No Data Available
9.17 Decomposition temperature	No Data Available
9.18 Viscosity	No Data Available
9.19 Molecular weight	220, 650, 1000, 1400, 1800, 2000, 3000
9.20 Solvent soluble	Aromatic and chlorinated solvents

#### 10. Stability and reactivity:

10.1 Chemical stability and Possibility of hazardous reactions	Stable under recommended storage conditions. But there is a risk of self-ignition at high temperature.
10.2 Conditions to avoid (Electrostatic discharge, Shock, vibration, etc.)	Avoid heat, flame, spark and ignition source. Avoid contact with incompatible materials.
10.3 Substance to avoid	Acid, Oxidant
10.4 Hazardous decomposition products	Carbon oxides

#### 11. Toxicological information:

11.1 Information on the likely route of exposure	
Inhalation	Possible
Oral	Possible
Skin Contact	Possible
Eye contact	Possible
11.2 Health Hazard Information	
Acute oral toxicity	LD50 11,340 mg/kg rat(650 mw, Quaker Oats)
Acute dermal toxicity	LD50 8,370 mg/kg rabbit(650 mw, Quaker Oats)
Acute inhalation toxicity	No Data Available
Skin corrosion or irritation	May cause slight skin irritation.
Serious eyes damages or irritation	May cause slight eye irritation.
Respiratory sensitization	No Data Available
Skin sensitization:	No Data Available
Specific target organ toxicity substance (single exposure)	No Data Available
Specific target organ toxicity substance	No Data Available
Germ cell mutagenicity	No Data Available
Reproductive toxicity	No Data Available

	<b>Safety Data Sheet</b>	Doc. No.	MSDS-004
		Initial Issue	Nov. 1996
		Revision Date	Jul. 2019
Substance name	Polytetramethylene Ether Glycol (PTMEG)		

Carcinogenicity

IARC	No Data Available
ACGIH	No Data Available
NTP	No Data Available
OSHA	No Data Available

Aspiration hazard

No Data Available

11.3 Numerical Scale of toxicity  
(Acute toxicity Estimates)

No Data Available

**12. Ecological information:**

12.1 Ecotoxicity

Fish	No Data Available
Crustacean	No Data Available
Bird	No Data Available

12.2 Persistence and degradability

Persistence	No Data Available
degradability	No Data Available

12.3 Bioaccumulative potential

Accumulative	No Data Available
Biodegradation	No Data Available

12.4 Mobility in soil

No Data Available

12.5 Other hazardous effects

No Data Available

**13. Disposal considerations:**

13.1 Disposal methods No Data Available

13.2 Disposal attention Consider notices of regulations in case that it is indicated in waste disposal regulation.

**14. Transport information:**

14.1 U.S. Department of Transportation (DOT) Not regulated as dangerous good

14.2 International Maritime Organization (IMDG) Not regulated as dangerous good

14.3 International Air Transport Association (IATA) Not regulated as dangerous good


/ International Civil Aviation Organization (ICAO)

**15. Regulatory information:**

15.1 Korean Industrial Safety and Health Act Not Applicable

15.2 Korea Toxic Chemicals Control Act (KCCA) Not Applicable

15.3 Safety Control of Dangerous Substances Act in Korea Not Applicable

	<h2 style="margin: 0;">Safety Data Sheet</h2>	Doc. No.	MSDS-004
		Initial Issue	Nov. 1996
		Revision Date	Jul. 2019
Substance name	Polytetramethylene Ether Glycol (PTMEG)		

### 15.4 International Regulations

US Toxic Substance Chemical Control Act (TSCA)	Listed
Canada Domestic Substance List (DSL or NDSL)	Listed on Canada's DSL List
American Management Information (OSHA Regulation)	Not Applicable
American Management Information (CERCLA Regulation)	Not Applicable
American Management Information (EPCRA 302 Regulation)	Not Applicable
American Management Information (EPCRA 304 Regulation)	Not Applicable
American Management Information (EPCRA 313 Regulation)	Not Applicable
American Management Information (Rotterdam Convention material)	Not Applicable
American Management Information (Stockholm Convention material)	Not Applicable
American Management Information (Montreal Protocol material)	Not Applicable
EU classification Information (Final classification results)	Not Applicable
EU classification Information (Risk statement)	Not Applicable
EU classification Information (Safety statement)	Not Applicable

### 16. Other information:

#### 16.1 Reference:

Croner's: Emergency Spillage Guide.  
 Croner's: Emergency First Aid Guide. Croner's: Substances Hazardous to Health  
 ERG 2004, , RSAP, US DOT  
 National Institute of Technology and Evaluation, Japan  
 UN Recommendations on the Transport of Dangerous Goods Model Regulations, 14th Edition  
 TOXNET, U.S. National Library of Medicine <http://toxnet.nlm.nih.gov>  
 The Chemical Database, The Department of Chemistry at the University of Akron  
<http://ull.chemistry.uakron.edu/erd>  
 International Chemical Safety Cards(ICSC) <http://www.nihs.go.jp/ICSC>  
 ECB-ESIS(European chemical Substances Information System) <http://ecb.jrc.it/esis>  
 ECOTOX Database, EPA <http://cfpub.epa.gov/ecotox>  
 IUCLID Chemical Data Sheet, EC-ECB  
 Initial Assessment Report for SIAM 19, Synthetic Amorphous Silica, July 2004, UNEP, OECD.  
 IMDG Code 2006 edition (Amendment 33-06), IMO

16.2 Initial Issue Date Nov. 1996

#### 16.3 Revision Number and Date

- Revision Number 5  
 - Revision Date Jul. 2019

16.4 Others No Data Available