KorPTG	Safety Data Sheet	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 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.

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)

	Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.
Major spills	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 ℃ ~ 32 ℃
9.6 Initial boiling point and boiling range	> 204 ℃ (> 398 ℉)
9.7 Flash point	259 ℃

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 ℃)
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
9.19Molecular 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 ㎎/kg rat(650 mw, Quaker Oats)
Acute dermal toxicity	LD50 8,370 ㎎/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

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) / International Civil Aviation Organization (ICAO)	Not regulated as dangerous good

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

15.4 International Regulations

US Toxic Substance Chemical Control Act (TSCA)	Listed
Canada Domestic Substance List (DSL or NDSL)	Listed on Canda'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