

물질안전보건자료	 (주) 폴리머테크	EK No.	PTK-77
(Material Safety Data Sheet)		제정일자	2019.04.02
Compounding		개정일자	
TPE TE7000		개정횟수	
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The manufacturer of this product urges anyone using this product to read the following MSDS information and become aware of the properties associated with this material. Users should consider consulting reference sources or individuals that are trained in ventilation, material handling/storage and fire prevention prior to its intended use.

1. IDENTIFICATION

- A. Product Name : TPE(Thermoplastic Elastomer) TE7000
- B. Recommended Use and Restriction or Use
 General use : Teeth brush grip, gasket, house hold goods
 Restriction on Use : Not available
- C. Manufacturer / Supplier
 Supplier : Polymertech CO.,LTD
 Address : 42-5, SINJANG 6-GIL, JANGCHEON-MYEON GUMI-CI GYEONGSANGBUK-DO, KOREA
 Division in Charge : Quality Assurance Team
 Person in Charge : Quality Assurance Team
 Emergency Phone No. : +82-54-472-0431
 Fax No. : +82-54-472-0432

2. HAZARDS IDENTIFICATION

- A. GHS Classification : Not classifiable

B. GHS label elements

Hazard Symbols	Signal Word	Hazard Statement
Not Applicable	Not Applicable	Not Applicable

Precautionary statement : Not applicable

- C. Other hazards which do not result in classification
 ○NFPA : health=0, Flammability=1, Reactivity=0

3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS No.	Contains(%)	Exposure Limit(s)
TPE(Thermoplastic Elastomer)	Mixture	100%	Not Established
Additives		3~5	

4. FIRST-AID MEASURES

- A. Eye Contact :
 ○ Immediately flush eyes with plenty of water at least 15 to 20 min.
 ○ Get medical advice/attention immediately.
- B. Skin Contact :
 ○ Flush skin with plenty of water and soap or mild cleanser at least 15 to 20 min.

Get medical advice/attention immediately.

C. Inhalation :

Immediately remove exposed person to fresh air, make warm and keep at rest in a position comfortable for breathing.

Perform artificial respiration if necessary.

Call a physician.

D. Ingestion :

If occur vomiting, lay the patient down as head would be lower than body for suffocation prevention.

Call a physician.

E. Note to physician :

There is no specific antidote.

Treatment may vary with condition of victim and specifics of incident.

5. FIRE-FIGHTING MEASURE

A. Extinguishing media :

Water spray, foam, dry chemicals, and carbon dioxide.

B. Special Exposure Hazards :

This product is not flammable but can burn under the right conditions. Burning can produce the following combustion products: Carbon monoxide(CO), carbon dioxide(CO₂) and carbon particulates. Carbon monoxide is a highly toxic colorless gas. Carbon dioxide can displace oxygen and act as an asphyxiant in poorly ventilate spaces.

C. Protective Equipment :

Use suitable personal protective equipment(full protective clothing, self contained breathing apparatus, helmet, goggles

6. ACCIDENTAL RELEASE MEASURES

A. Personal precaution :

Spilled material can cause a slipping hazard. Clean up immediately and dispose of properly. Wear appropriate respiratory protective equipments when responding to large clean ups.

B. Environmental precautions :

No specific measures. Material should be recovered and placed in suitable container for recycle or disposal under local regulatory requirements. Avoid generating dust.

C. Method for cleaning

Material can be swept, shoveled or vacuumed using suitable equipment

7. HANDLING AND STORAGE

A. Handling

Avoid contact with potential sources of ignition. During processing material should be handled in well ventilated areas and care should be taken to avoid formation and accumulation of dust .

Elevated processing temperatures may result in some degree of thermal degradation.

Avoid processing temperatures above 200 °C (392°F) where product degradation could potentially occur.

The product is poor conductor and can accumulate electrostatic charges ,

Precautions normally used for preventing the accumulation of electrostatic charges, such as proper grounding of processing equipment could lead to the ignition flammable vapors (if present) or increase the potential for dust explosions.

B. Storage

Storage the product in a well ventilated covered place in sealed packaging, away from direct sunlight and heat sources to avoid product degradation. Store at ambient temperatures.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

A. Exposure limit values

There are no occupational exposure standards for this product. The following particulate limits are stated as a guideline as fine particles can be an inherent part of the physical form of certain form of certain products.

Particulate	OSHA PEL.
Total Dust (8 hr)	10mg/m ³

B. Exposure Control

Product should be handled only in are as with suitable exhaust ventilation. When concentration In air exceed OSHA particulate limits, an approved dust mask or respirator should be used in Processes where heated vapors may be produced a NIOSH approved respirator or engineering Controls may be needed to avoid vapor exposure by inhalation.

C. Personal Protection

- Eye protection; Safety glasses with side shields .in processes where the product is in contact With hot materials a face shield should be worn.
- Skin protection; Cloth or leather work gloves. in processes where the product is in contact With hot materials thermal protection gloves, apron and arm protection should be worn.

9. PHYSICAL AND CHEMICAL PROPERTIES

1) Appearance

Color	:	all color
Form	:	Pellet
2) Odor	:	odorless
3) Bulk density	:	0.45 ~ 0.65(g/cm ³)
4) Specific gravity	:	> 1
5) Solubility in water	:	insoluble
6) Flash point	:	not applicable

Important health, safety and environmental information :

- A. pH : Not applicable
- B. Boiling point/boiling range : Not applicable
- c. Melting point : Not applicable
- D. Flash point: Not available
- E. Flammability(solid, gas) : Not available
- F. Explosive properties : Not applicable
- G. Oxidizing properties : Not applicable
- H. Vapour pressure : Not applicable
- I. Relative density : Not available
- J. Solubility : Insoluble

- K. Water solubility : Not available
- L. Partition coefficient : Not available
- M. Viscosity : Not applicable
- N. Vapour density : Not applicable
- O. Evaporation rate : Not available

10. STABILITY AND REACTIVITY

The product is stable and inert in the recommended storage and handling

Conditions to Avoid Instability :

Exposure to direct sunlight, ultraviolet light or elevated temperatures over prolonged Periods of time may cause degradation and discoloring . Accumulation of product in equipment, processes or are as exposed to elevated temperatures over extended Periods of time and in the presence of air may lead to combustion of the product.

11. TOXICOLOGICAL INFORMATION

A. Information on the likely routes of exposure :

- Respiratory tracts : Not classifiable
- Oral : Not classifiable
- Eye·Skin : Not classifiable

B. Delayed and immediate effects and also chronic effects from short and long term exposure :

- Acute Toxicity
 - Acute oral toxicity : Not available
 - Acute dermal toxicity : Not available
 - Acute inhalation toxicity : Not available
- Skin Corrosion/Irritation : Not classifiable(human)
- Serious Eye damage/Eye irritation : Not classifiable
- Respiratory sensitization : Not classifiable
- Skin sensitization : Not classifiable
- Carcinogenicity : Not Classifiable (human, rat, mice)
Not Classifiable as a carcinogen in NTP, IARC
- Germ Cell Mutagenicity : Not available
- Reproductive toxicity : Not Classifiable
- Specific target organ toxicity(single exposure) : Not available
- Specific target organ toxicity(repeated exposure) : Not available
- Aspiration hazard : Not available

C. Other toxicity information :

-These products are manufactured with synthetic raw materials that do not by-products.

12. ECOLOGICAL INFORMATION

- A. Aquatic toxicity : Not available
- B. Persistence and degradability : Not available
- C. Bioaccumulative potential : Not available
- D. Mobility in soil : Not available
- E. Other adverse effects : Not available

13. DISPOSAL CONSIDERATIONS

A. Disposal methods :

-The user of this product must properly characterize the waste/container generated from the use of this product in accordance with all applicable federal, state and/or local laws and regulations in order to determine the proper disposal of the waste in accordance with all applicable federal, state and/or local laws and regulations.

B. Special precautions for disposal :

-The user of this product must disposal by oneself or entrust to waste disposer or person who other' s waste recycle and dispose, person who establish and operate waste disposal facilities.

-Consult local, state, federal, international or country specific regulations as appropriate.

14. TRANSPORT INFORMATION

A. UN Number : Not available

B. UN Proper Shipping name : Not available

C. Transport hazard class(es) : Not applicable

D. Packing group : Not applicable

E. Sea pollutants : Not available

F. Special precautions for user related to transport or transportation measures

○Type of extraordinary step in fire : F-A

○Type of extraordinary step in spill : Not applicable

-Local transport follows in accordance with Dangerous goods Safety Management Law.

-Package and transport follow in accordance with Department of Transportation (DOT) and other regulatory agency requirements.

G. IATA not regulated

15. REGULATORY INFORMATION

A. ISHL(The industrial Safety and Health Law) :

-This product is not subject to the chemical for classification and labeling under ISHL Article 41.

-This product is not subject to the chemical needs monitoring workplace exposure limit under ISHL Article 42.

-This product is not subject to the chemical specified the exposure limit under ISHL Article 42., Public notice 2008-2.

-This product is not contain a chemical subject to regulated hazardous substances under Industrial Health Standards Article 166, Table 7.

B. TCCA(The Toxic Chemical Control Act) :

-This product is not classified as Toxic chemical and Observational chemical under TCCA Article 2.3. and 2.4.

C. Dangerous goods Safety Management Law :

-This product is not classified under the Presidential decree of Dangerous goods Safety Management Law, Revision 2006.05.25, Table 1.

D. Waste Management Law :

-This product is classified as Waste beside Designated Waste under The Presidential decree of Waste Management Law, Table 1.

E. Other local or international regulation :

○POPs Management Law : Not applicable

- Rotterdam Convention on Harmful Chemicals & Pesticides : Not applicable
- Stockholm Convention on Persistent Organic Pollutants : Not applicable
- Montreal Protocol on Substances That Deplete the Ozone Layer : Not applicable
- EU Classification: Not available
- Administration Information of U.S.A
 - OSHA regulation(29CFR1910.119) : Not applicable
 - CERCLA 103 regulation(40CFR302.4) : Not applicable
 - EPCRA 302 regulation(40CFR355.30) : Not applicable
 - EPCRA 304 regulation(40CFR355.40) : Not applicable
 - EPCRA 313 regulation(40CFR372.65) : Not applicable

16. TRANSPORT INFORMATION

- A. Reference : Handbook of Industrial toxication, SHINKWANGPUB,TOXNET, U.S. National Library of Medicine, NCIS, National Institute of Environmental Research(<http://ncis.nier.go.kr>), Hazardous material information management system, National Emergency Management Agency (<http://hazmat.nema.go.kr>), IUCLID Chemical Data Sheet, EC-ECB

- B. Revision Data : 2019.04.02

Other reference in connection
with preparation of MSDS : polymertech co., Ltd
-Occupational Safety & Health AgencyE. Other
information : Not available