

# SAFETY DATA SHEET

**Date Printed** : 01 August 1994  
**Date Updated** : 28. May 2021  
**Version** : Rev. 26  
**Regulation** : In accordance with Regulation (EU) 2015/830 (REACH), Annex II

## 1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY

### 1.1 Product identifier

**Name of the Product** : KEP Ethylene Propylene Rubber

Substance Name	CAS No.	EC/List No.	Applicable Grade
Ethylene propylene 5-ethylidene-2-norbornene terpolymer	25038-36-2	607-505-0	KEP210, KEP240, KEP270, KEP330 KEP350, KEP370F, KEP570P, KEP430H, KEP435 KEP510, KEP570F, KEP650, KEP650L KEP281F, KEP2371, KEP1030F, KEP7141 KEP2320, KEP2380, KEP2480, KEP5770, KEP282F, KEP9590, KEP5560, KEP6590, KEP8512, KEP9520
Ethylene propylene Copolymer	9010-79-1	618-455-4	KEP020P, KEP070P, KEP110, KEP2060, KEP0520T, KEP0530

### 1.2 Relevant identified uses of the substance or mixture and uses advised against

**Relevant identified uses** : Parts of automobile, Cables, Roofing Sheet, General industrial parts etc.

**Uses advised against** : No information

### 1.3 Details of the supplier of the Safety Data Sheet

**Supplier** : KUMHO POLYCHEM CO., LTD.

**Street address/P.O. Box** : #144-6, Weoulha-dong, Yeosu-City, Cheonranam-Do, Korea

**Country ID/Postcode/Place** : 59611

**Telephone number** : +82-61-688-2823

**Telefax** : +82-61-688-2850

**e-mail address of competent person responsible for the SDS** : jwh3177@polychem.co.kr

### 1.4. Emergency Telephone :

**Emergency Telephone number** : +82-61-688-2700 (Fax: +82-61-688-2899)

**Opening hours** : Not available

**Other comments (e.g. language(s) of the phone service)** : Not available

## 2. HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

**2.1.1 Classification according to Regulation (EC) No. 1272/2008 [CLP]** : Not classified

**2.1.2 Additional information**: Not available

### 2.2 Label elements

**Hazard pictograms** : Not applicable

**Signal word** : Not applicable

**Hazard statements** : Not applicable

**Additional precautionary statements** : Not applicable

### 2.3 Other hazards : No information available

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.1 Substances

	Ethylene propylene 5-ethylidene-2-norbornene terpolymer	Ethylene propylene Copolymer
<b>Other Name/s</b>	2-norbornene, 5-ethylidene polymer with ethylene and propene	1-propene, polymer with ethene
<b>Content(%)</b>	100	100

\* Monomers of the polymers have been registered under EU REACH regulation in compliance with the Article 6 of the regulation. Below is the information on the Registration.

Component	CAS No.	EC No.	EU REACH Registration No
Ethylene	74-85-1	200-815-3	01-2119462827-27-0116
Propylene	115-07-1	204-062-1	01-2119447103-50-0113
5-Etylidene-2-norbornene	16219-75-3	240-347-7	01-2119494722-31-0002

## 4. FIRST-AID MEASURES

### 4.1 Description of first aid measures

**General notes :** - not available

**After eye contact :** - If in an eye, remove in the same manner as one would when any solid object enters the eye since the product is an inert solid.

**After skin contact :** - If the skin is in contact with the heated product, immediately immerse in or flush the affected area with a large amount of cold water to dissipate heat. Cover with clean cotton sheet or gauze and get prompt medical attention.

- No attempt should be made to remove the heated product from the affected skin or to remove the contaminating clothing as the damaged flesh can easily be torn.

**After inhalation :** - Using proper respiratory protection, immediately remove the affected victim from exposure.  
- Administer artificial respiration if breathing has stopped.  
- Keep the affected victim at rest.  
- Call for prompt medical attention

**After ingestion :** - First aid is normally not required

### 4.2 Most important symptoms and effects

**Acute effects**

None known.

**Delayed effects**

None known.

### 4.3 Indication of immediate medical attention and notes for physician

- Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

## 5. FIRE-FIGHTING MEASURES

### 5.1 Extinguishing media

**Suitable Extinguishing Media :** - Foam  
- Carbon dioxide  
- Water spray

**Unsuitable Extinguishing Media :** - No information available

### 5.2 Special hazards arising from the substance or mixture

**Hazardous combustion products :** - Due to thermal decomposition and incomplete combustion gases such as black smoke, carbon monoxide and other toxic gases, danger based on inhalation of such gases may occur.

### 5.3 Advice for firefighters

- Depending on the situation, protective equipment such as chemical cartridge respirator for fire-fighting and protective clothing shall be worn.

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions, protective equipment and emergency procedures

- **For non-emergency personnel**  
**Protective equipment :**



Human: inhalation	-	-	-	-	-	-	-	-	-	-	-	-
Human: dermal	-	-	-	-	-	-	-	-	-	-	-	-
Environment: water	-											
Environment: air	-											
Environment: soil	-											
Environment: sediment	-											
Environment: STP	-											
Environment: oral	-											

## 8.2 Exposure controls

### 8.2.1 Appropriate engineering controls :

#### Substance/mixture related measures to prevent exposure during identified uses:

- Since volatile matters will be generated at the time of mixing, processing and molding work, install equipment to wash the hands and eyes nearby.

**Structural measures to prevent exposure:** Not available

**Organisational measures to prevent exposure:** Not available

**Technical measures to prevent exposure:** Not available

### 8.2.2 Individual protection measures, such as personal protective equipment :

#### Eye and face protection:

- Install equipment to wash the hands and eyes nearby.

#### Skin protection:

- Use work clothes and safety shoes as required.

#### Hand protection:

- Use protective gloves as required.

#### Respiratory protection:

- Use a protective mask as required.

### 8.2.3 Environmental exposure controls

#### Substance/mixture related measures to prevent exposure:

- Prevent entry into waterways, sewers, basements or confined areas.

**Instruction measures to prevent exposure:** Not available

**Organisational measures to prevent exposure:** Not available

**Technical measures to prevent exposure:** Not available

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

#### Appearance

<b>Description :</b>	Solid
<b>Color :</b>	White or yellow-Green
<b>Odor :</b>	Slight Odor
<b>Odor threshold :</b>	Not applicable
<b>pH :</b>	Not applicable
<b>Melting point/freezing point :</b>	Not applicable
<b>Initial boiling point and boiling range :</b>	Not applicable
<b>Flash point :</b>	250 °C
<b>Evaporation rate :</b>	Not applicable
<b>Flammability (solid, gas) :</b>	Not applicable
<b>Upper/lower flammability or explosive limits :</b>	Not applicable
<b>Vapor pressure :</b>	Not applicable

<b>Solubility (ies) :</b>	Insoluble in water
<b>Vapor density :</b>	Not applicable
<b>Specific gravity :</b>	0.86 ~ 0.89
<b>Partition coefficient: n-octanol/water :</b>	Not applicable
<b>Auto ignition temperature :</b>	Not applicable
<b>Decomposition temperature :</b>	250 °C
<b>Viscosity :</b>	Not applicable
<b>Explosive properties :</b>	Not applicable
<b>Oxidizing properties :</b>	Not applicable
<b>Molecular weight :</b>	100,000 ~ 600,000

**9.2 Other information :** No information available

## 10. STABILITY AND REACTIVITY

### 10.1 Reactivity :

- Polymerization does not occur.

### 10.2 Chemical stability :

- Stable at normal temperature and pressure

**10.3 Possibility of hazardous reactions :** Not applicable

**10.4 Conditions to avoid :** Not applicable

**10.5 Incompatible materials :** Not applicable

**10.6 Hazardous decomposition products :** Not applicable

## 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on toxicology effects

#### Acute toxicity;

**Oral** Not applicable

**Dermal** Not applicable

**Inhalation** Not applicable

**Skin Corrosion/ Irritation;** Not applicable

**Serious Eye Damage/ Irritation;** Not applicable

**Respiratory sensitization;** Not applicable

**Skin Sensitization;** Not applicable

**Carcinogenicity;** Not applicable

**Mutagenicity;** Not applicable

**Reproductive toxicity;** Not applicable

**Specific target organ toxicity (single exposure);** Not applicable

**Specific target organ toxicity (repeat exposure);** Not applicable

**Aspiration Hazard;** Not applicable

## 12. ECOLOGICAL INFORMATION

### 12.1 Toxicity

**Acute toxicity** No information available

<b>Chronic toxicity</b>	No information available
<b>12.2 Persistence and degradability</b>	No information available
<b>12.3 Bioaccumulative potential</b>	No information available
<b>12.4 Mobility in soil</b>	No information available
<b>12.5 Results of PBT and vPvB assessment</b>	No information available
<b>12.6 Other adverse effects</b>	No information available

### 13. DISPOSAL CONSIDERATIONS

#### 13.1. Waste treatment methods

**Protective measures:**

- Observe all regulations made by administration.

**Waste codes / Waste designation according to LoW(2015): 07 02 99**

**Waste treatment-relevant information:**

- Observe all regulations made by administration.

**Sewage disposal-relevant information:** Not available

**Other disposal recommendations:** Not available

### 14. TRANSPORT INFORMATION

<b>14.1 UN number</b>	: Not applicable to the criteria for classification
<b>14.2 UN proper shipping name</b>	: Not applicable to the criteria for classification
<b>14.3 Transport hazard class</b>	: Not applicable to the criteria for classification
<b>14.4 Packing group</b>	: Not applicable to the criteria for classification
<b>14.5 Environmental hazards</b>	: Not applicable to the criteria for classification
<b>14.6 Special precautions for user</b>	
- in case of fire	: Not applicable
- in case of leakage	: Not applicable
<b>14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	: Not applicable

### 15. REGULATORY INFORMATION

	Ethylene propylene Copolymer	Ethylene propylene 5-ethylidene-2-norbornene terpolymer
EU Regulatory Information		
EU classification		
Annex I of Directive 67/548/EEC :		
Classification :	Not classified	Not regulated
Risk phrases :	Not applicable	Not regulated
Safety phrases :	Not applicable	Not regulated
EU CLP 2008 :		
Classification :	Not classified	Not regulated
Hazard statement codes :	Not applicable	Not regulated
Precautionary statement codes :	Not applicable	Not regulated
EU SVHC list :	Not regulated	Not regulated
EU Authorisation List :	Not regulated	Not regulated
EU Restriction list :	Not regulated	Not regulated
Foreign Regulatory Information		
United States of America Regulatory information		
U.S.A management information (TSCA)	Present (ACTIVE)	Present [XU] (ACTIVE)
U.S.A management information (OSHA Regulation)	Not regulated	Not regulated
U.S.A management information (CERCLA Regulation)	Not regulated	Not regulated
U.S.A management information (EPCRA 302 Regulation)	Not regulated	Not regulated

U.S.A management information (EPCRA 304 Regulation)	Not regulated	Not regulated
U.S.A management information (EPCRA 313 Regulation)	Not regulated	Not regulated
Korea management information :	Existing Chemical Substance (KE-12546)	Existing Chemical Substance (KE-13881)

## 15.2 Chemical safety assessment :

- No chemical safety assessment has been carried out for this product by the supplier.

## 16. OTHER INFORMATION

Product safety data sheet for KEP Ethylene Propylene rubber prepared in accordance with Regulation (EU) 2015/830 (REACH), Annex II

### 16.1 Indication of changes:

**Version** : Rev. 26

**Revision date** : 28 May 2020

### 16.2. Abbreviations and acronyms:

**CLP** = Classification Labelling Packaging Regulation ; Regulation (EC) No 1272/2008

**CAS No.** = Chemical Abstracts Service number

**DNEL** = Derived No Effect Level

**EC Number** = EINECS and ELINCS Number (see also EINECS and ELINCS)

**EU** = European Union

**OSHA** = European Agency for Safety and Health at work

**PBT** = Persistent, Bioaccumulative and Toxic substance

**PNEC(s)** = Predicted No Effect Concentration(s)

**REACH** = Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006

**SVHC** = Substances of Very High Concern

**vPvB** = Very Persistent and Very Bioaccumulative

### 16.3 Key literature reference and sources for data:

- HSDB (Hazardous Substances Data Bank)
- ICSC (International Chemical Safety Cards)
- NLM (United States National Library of Medicine)
- IUCLID (International Uniform Chemical Information Database)
- NCIS (National Chemicals Information System of South Korea)
- American Conference of Governmental Industrial Hygienists TLVs and BEIs.
- NIOSH Pocket Guide; <http://www.cdc.gov/niosh/npg/npgdcas.html>
- IARC Monographs on the Evaluation of Carcinogenic Risks to Humans; <http://monographs.iarc.fr>

### 16.4 Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008

[CLP]: Not applicable

### 16.5 Relevant R-phrases and/or H-statements (number and full text): Not applicable

### 16.6 Training advise:

- Do not handle until all safety precautions have been read and understood.

### 16.7 Further information: No information available

This safety data sheet (SDS) is based on the legal provisions of the REACH Regulation, as amended. Its contents are intended as a guide to the appropriate precautionary handling of the material. It is the responsibility of recipients of this SDS to ensure that the information contained therein is properly read and understood by all people who may use, handle, dispose or in any way come in contact with the product. Information and instructions provided in this SDS are based on the current state of scientific and technical knowledge at the date of issue indicated. It should not be construed

**as any guarantee of technical performance, suitability for particular applications, and does not establish a legally valid contractual relationship.**

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