

# **SAFETY DATA SHEET**

**Date Printed** : 03 May 2010  
**Date Updated** : Jan 07, 2026  
**Version** : Rev. 16  
**Regulation** : In accordance with Regulation (EU) 2020/878 (REACH), Annex II

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

### **1.1 Product identifier**

**Name of the Product** : KEP Oil Extended Ethylene Propylene rubber  
**Applicable Grade** : KEP960N, KEP960NF, KEP980N, KEP901N, KEP902N, KEP4640E, KEP4640EP  
KEP9570E

### **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**

**Company name** : KUMHO POLYCHEM CO., LTD.  
**Address** : #144-6, Weoulha-dong, Yeosu-City, Cheonranam-Do, Korea  
**Contact Telephone** : +82-61-808-2551  
**Fax** : +82-61-808-2560  
**Email Address** : srkim1127@polychem.co.kr

**1.4. Emergency Telephone** : +82-61-688-2700 (Fax: +82-61-688-2899)  
**Emergency telephone number** : +82-61-688-2700 (Fax: +82-61-688-2899)  
**Office hours** : Not available  
**Other comments (e.g. language(s) of the telephone service)** : Not available

## **2. HAZARDS IDENTIFICATION**

### **2.1 Classification of the substance or mixture**

**2.1.1 Labelling in accordance with 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  
**Additional hazard information (EU)** : Not applicable

### **2.3 Other hazards :**

- The substance does not meet the criteria for classification as vPvB and PBT in accordance with Regulation (EC) No 1907/2006, Annex XIII
- Substance identified not as having endocrine-disrupting properties in accordance with Regulation (EU) 2017/2100 and 2018/605
- The substance is not listed in article 59.

## **3. COMPOSITION/INFORMATION ON INGREDIENTS**

### **3.1 Substances**

	<b>Distillates (Petroleum) hydrotreated heavy paraffinic</b>	<b>Ethylene propylene 5-ethylidene-2-norbornene terpolymer</b>
<b>Other Name/s</b>	Hydrotreated (mild) heavy paraffinic distillate	2-norbornene, 5-ethylidene polymer with ethylene and propene
<b>CAS No</b>	64742-54-7	25038-36-2
<b>EC/List No.</b>	265-157-1	607-505-0
<b>Classification</b>	See section.15 ※ Note L: The carcinogen classification does not apply because the substance	See section.15

	contains less than 3 % (m/m) of dimethyl sulphoxide (DMSO) measured using the IP 346 method.	
<b>SCL / Fator-M / ATE</b>	-	-

	<b>Distillates (Petroleum) hydrotreated heavy paraffinic</b>	<b>Ethylene propylene 5-ethylidene-2-norbornene terpolymer</b>	<b>Applicable Grade/s</b>
<b>Concentration (%)</b>	32 ~ 35	65 ~ 68	KEP960N, KEP960NF
	42 ~ 44	56 ~ 58	KEP980N KEP4640E KEP4640EP
	49 ~ 51	49 ~ 51	KEP901N KEP902N
	16 ~ 18	82 ~ 84	KEP9570E

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

<b>Component</b>	<b>CAS No.</b>	<b>EC No.</b>	<b>Registration No.</b>	<b>Classification under Regulation (EC) No 1272/2008 [CLP]</b>
Ethylene	74-85-1	200-815-3	01-2119462827-27-0116	Press. Gas Flam. Gas 1 H220 STOT SE 3 H336
Propylene	115-07-1	204-062-1	01-2119447103-50-0113	Press. Gas, Flam. Gas 1 H220
5-Etylidene-2-norbornene	16219-75-3	240-347-7	01-2119494722-31-0002	Not available
Process Oil P-4K	64742-54-7	265-157-1	01-2119484627-25-0057	Carc. 1B H350

## 4. FIRST-AID MEASURES

### 4.1 Description of first aid measures

**After eye contact :** - In case of contact with the eyes can cause sore or irritation; remove immediately and consult the doctor.

**After skin contact :** - If the material is hot, soak or immediately wash the affected area with plenty of running water to cool down.  
- Then cover the wound with a cotton gauze and receive medical assistance.

**After inhalation :** - If inhaling the steam produced during the transformation of the product and if you have pain in the neck and nose, the patient should be referred to an uncontaminated area and receive medical assistance.

**After ingestion :** - If ingesting a large amount of chemicals consult the doctor.

**First Responder Self-Protection :** - Not available

### 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

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## 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

- Wear protective gloves.

### 6.2 Environmental precautions

- Pay attention so that product does not flow into the sewage or public water area.

### 6.3 Methods and material for containment and cleaning up

- Sweep up the scattered product and recover into a suitable container.

### 6.4 Reference to other sections

- See also sections 8 and 13 of the Safety Data Sheet.

## 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

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

### 7.2 Conditions for safe storage, including any incompatibilities

- Keep away from direct sunlight and ultraviolet rays. Exposure to direct sunlight and ultraviolet rays cause the polymer to generate light-induced crosslinked gel in the product.

- Avoid wetting and abrupt temperature change when storing this material.

- Please store product at room temperature, and keep it dry. Especially, high ethylene type EP(D)M should be stored in a warm room for more than 48hours prior to use and process

### 7.3 Specific end use(s)

- None

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### 8.1 Control parameters

#### Occupational Exposure Limits :

Nome	Korea regulation	ACGIH regulation	Biological Exposure Index	OSHA regulation	NIOSH regulation	EU regulation
Distillates (Petroleum) hydrotreated heavy paraffinic	Not available	Not available	Not available	TWA = 5 mg/m <sup>3</sup> (oil mist)	TWA = 5 mg/m <sup>3</sup>	Not available

				(mineral))	STEL = 10 mg/m <sup>3</sup> (oil mist (mineral))	
Ethylene propylene 5-ethylidene-2-norbornene terpolymer.	Not available	Not available				

### Occupational Exposure Controls :

Exposure route of relevance	DNELs, DMELs, PNECs											
	Industrial				Professional				Consumer			
	Long term, local effects	Long term, systemic effects	Short term, local effects	Short term, systemic effect	Long term, local effects	Long term, systemic effects	Short term, local effects	Short term, systemic effects	Long term, local effects	Long term, systemic effects	Short term, local effects	Short term, systemic effects
Human: oral	-	-	-	-	-	-	-	-	-	-	-	-
Human: inhalation	-	-	-	-	-	-	-	-	-	-	-	-
Human: dermal	-	-	-	-	-	-	-	-	-	-	-	-
Environment: water	-											
Environment: air	-											
Environment: soil	-											
Environment: sediment	-											
Environment: STP	-											
Environment: oral	Distillates (Petroleum) hydrotreated heavy paraffinic: PNEC = 9.33 mg/kg food											

## 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

	Distillates (Petroleum) hydrotreated heavy paraffinic	Ethylene propylene 5-ethylidene- 2-norbornene terpolymer.
<b>Appearance</b>		
<b>Description :</b>	liquid	Solid
<b>Color :</b>	White or Yellow	White or yellow-Green
<b>Odor :</b>	Slight odor	Slight odor
<b>Odor threshold :</b>	Not applicable	Not applicable
<b>pH :</b>	Not applicable	Not applicable
<b>Melting point/freezing point :</b>	Not applicable	Not applicable
<b>Initial boiling point and boiling range :</b>	> 204 °C	Not applicable
<b>Flash point :</b>	> 270 °C	250 °C
<b>Evaporation rate :</b>	0.01 (Butyl Acetate=1)	Not applicable
<b>Flammability (solid, gas) :</b>	Not applicable	Not applicable
<b>Upper/lower flammability or explosive limits :</b>	7 / 0.9 %	Not applicable
<b>Vapor pressure :</b>	5 mmHg	Not applicable
<b>Solubility (ies) :</b>	Insoluble	Insoluble in water
<b>Vapor density :</b>	5	Not applicable
<b>Specific gravity :</b>	0.88	0.86 ~ 0.89
<b>Partition coefficient: n-octanol/water :</b>	Not applicable	Not applicable
<b>Auto ignition temperature :</b>	Not applicable	Not applicable
<b>Decomposition temperature :</b>	Not applicable	250 °C
<b>Viscosity :</b>	Not applicable	Not applicable
<b>Explosive properties :</b>	Not applicable	Not applicable
<b>Oxidizing properties :</b>	Not applicable	Not applicable
<b>Molecular weight :</b>	Not applicable	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 toxicological effects

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	Distillates (Petroleum) hydrotreated heavy paraffinic	Ethylene propylene 5-ethylidene-2-norbornene terpolymer.
<b>Acute toxicity;</b>		
<b>Oral</b>	Rat, LD <sub>50</sub> = 15,000 mg/kg	Not applicable
<b>Dermal</b>	Rabbit, LD <sub>50</sub> = 5,000 mg/kg	Not applicable
<b>Inhalation</b>	Not applicable	Not applicable
<b>Skin Corrosion/ Irritation;</b>	Non irritation (rabbit)	Not applicable
<b>Serious Eye Damage/ Irritation;</b>	Non irritation (rabbit)	Not applicable
<b>Respiratory sensitization;</b>	Not applicable	Not applicable
<b>Skin Sensitization;</b>	Not applicable	Not applicable
<b>Carcinogenicity;</b>	Not classified ※ It is not classified as a carcinogen because it contains less than 3% DMSO by the IP346 method.	Not applicable
<b>Mutagenicity;</b>	Not applicable	Not applicable
<b>Reproductive toxicity;</b>	Not applicable	Not applicable
<b>Specific target organ toxicity (single exposure);</b>	Not applicable	Not applicable
<b>Specific target organ toxicity (repeat exposure);</b>	Not applicable	Not applicable
<b>Aspiration Hazard;</b>	Not applicable	Not applicable
<b>Endocrine disrupting properties</b>	Substance identified as not having endocrine-disrupting properties in accordance with Regulation (EU) 2017/2100 and 2018/605	Substance identified as not having endocrine-disrupting properties in accordance with Regulation (EU) 2017/2100 and 2018/605

## 12. ECOLOGICAL INFORMATION

	Distillates (Petroleum) hydrotreated heavy paraffinic	Ethylene propylene 5-ethylidene-2-norbornene terpolymer.
<b>12.1 Toxicity</b>		
<b>Acute toxicity</b>	No information available	No information available
<b>Chronic toxicity</b>	No information available	No information available
<b>12.2 Persistence and degradability</b>	No information available	No information available
<b>12.3 Bioaccumulative potential</b>	6% biodegradation was observed after 28 days.	No information available
<b>12.4 Mobility in soil</b>	No information available	No information available
<b>12.5 Results of PBT and vPvB assessment</b>	No information available	No information available
<b>12.6 Endocrine disrupting properties</b>	Substance identified as not having endocrine-disrupting properties in accordance with Regulation (EU) 2017/2100 and 2018/605	Substance identified as not having endocrine-disrupting properties in accordance with Regulation (EU) 2017/2100 and 2018/605
<b>12.7 Other adverse effects</b>	No information available	No information available

## 13. DISPOSAL CONSIDERATIONS

### 13.1. Waste treatment methods

#### Protective measures:

- Comply with all administrative rules.

#### Waste codes/waste designations according to the European List of Waste :

#### Relevant information concerning waste treatment :

- Comply with all administrative rules.

**Relevant information concerning discharge through water :** Not available

**Other recommendations on disposal :** Not available

## 14. TRANSPORT INFORMATION

- 14.1 UN number** : Not applicable to the criteria for classification
- 14.2 UN proper shipping name** : Not applicable to the criteria for classification
- 14.3 Transport hazard class** : Not applicable to the criteria for classification
- 14.4 Packing group** : Not applicable to the criteria for classification
- 14.5 Environmental hazards** : Not applicable to the criteria for classification
- 14.6 Special precautions**
- in case of fire : Not applicable
  - in case of leakage : Not applicable

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**14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** : Not applicable

## 15. REGULATORY INFORMATION

### 15.1 Safety, health and environmental regulation/legislation specific for the substance or mixture

	Distillates (Petroleum) hydrotreated heavy paraffinic	Ethylene propylene 5- ethylidene-2-norbornene terpolymer
CANADA Regulations	All components are listed from DSL/NDSL	
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 (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)
Substance of the Rotterdam Protocol	Not regulated	Not regulated
Suspension of the Stockholm Protocol	Not regulated	Not regulated
Substance of the Montreal Protocol	Not regulated	Not regulated

### 15.2 hemical 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 Oil Extended Ethylene Propylene rubber prepared in accordance with Regulation (EU) 878/2020 (REACH), Annex II

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### 16.1 Indication of changes:

**Version** : Rev. 16

**Revision date** : January 07, 2026

### 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:

#### **Distillates (Petroleum) hydrotreated heavy paraffinic**

- Corporate Solution From Thomson Micromedex (<http://csi.micromedex.com>)
- 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
- ICSC (International Chemical Safety Cards)
- NLM (United States National Library of Medicine)
- The Chemical Database, The Department of Chemistry at the University of Akron (<http://ull.chemistry.uakron.edu/erd>)
- National Emergency Management Agency-Korea dangerous material inventory management system (<http://www.nema.go.kr/hazmat/main/main.jsp>)
- NCIS (National Chemicals Information System of South Korea)
- REACH information on registered substances (<http://apps.echa.europa.eu/registered/registered-sub.aspx>)
- 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>

#### **Ethylene propylene 5-ethylidene-2-norbornene terpolymer**

- 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

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**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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