

# KUMHO PETROCHEMICAL

## SAFETY DATA SHEET KUMHO KNB 40M

According to Regulation (EC) No 1907/2006, Annex II, as amended by Regulation (EU) No 453/2010,  
COMMISSION REGULATION (EU) 2015/830 of 28 May 2015.

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product name KUMHO KNB 40M

REACH registration number -

REACH registration notes Monomer is registered instead of Butadiene-Acrylonitrile polymer. (Registration number of monomer: Acrylonitrile: 01-2119474195-34-\*\*\*\*, Butadiene: 01-2119471988-16-\*\*\*\*)

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

Identified uses Raw materials for rubber products needing oil-proof characteristic (automobile parts, rubber hoses, gaskets, belts)

Uses advised against Not available.

#### 1.3. Details of the supplier of the safety data sheet

Supplier OR of KOREA KUMHO Petrochemical Co., Ltd.  
KIST Europe Forschungsgesellschaft mbH  
Campus E71  
66123 Saarbruecken  
Germany  
  
Tel: +49 681 9382 334  
Fax: +49 681 9382 319  
e-mail: reach.it@kist-europe.de

Manufacturer Korea Kumho Petrochemical Co., Ltd.  
64, Sanggae-ro, Nam-gu  
Ulsan, Korea  
680-180

Tel : +82-52-259-6051~7  
Fax : +82-52-259-6053

#### 1.4. Emergency telephone number

Emergency telephone +49 551 19240  
GIZ-Nord, Goettingen, Germany (English only)

### SECTION 2: Hazards identification

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

##### Classification (EC/1272/2008)

Physical hazards Not Classified

Health hazards Not Classified

Environmental hazards Not Classified

#### 2.2. Label elements

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Hazard statements NC Not Classified

## 2.3. Other hazards

### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

<b>BUTADIENE-ACRYLONITRILE POLYMER</b>	<b>97-99 %</b>
CAS number: 9003-18-3	
<b>Classification</b> Not Classified	
<b>Facid</b>	<b>&lt;1 %</b>
CAS number: 67701-06-8	
<b>Classification</b> Not Classified	
<b>Resin acids and Rosin acids, potassium salts</b>	<b>1-2 %</b>
CAS number: 61790-50-9                      EC number: 263-142-4	
<b>Classification</b> Not Classified	

The full text for all hazard statements is displayed in Section 16.

**Composition comments**                      Monomer is registered instead of Butadiene-Acrylonitrile polymer. (Registration number of monomer: Acrylonitrile: 01-2119474195-34-\*\*\*\*, Butadiene: 01-2119471988-16-\*\*\*\*)

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

<b>General information</b>	Get medical attention.
<b>Inhalation</b>	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Get medical attention if any discomfort continues.
<b>Ingestion</b>	Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if any discomfort continues. Rinse mouth.
<b>Skin contact</b>	Remove contaminated clothing and rinse skin thoroughly with water. Wash contaminated clothing before reuse. Get medical attention if any discomfort continues.
<b>Eye contact</b>	Do not rub eye. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes.

#### 4.2. Most important symptoms and effects, both acute and delayed

**Eye contact**                      May cause minor irritation on eye.

#### 4.3. Indication of any immediate medical attention and special treatment needed

**Notes for the doctor**                      Treatment may vary with condition of victim and specifics of incident.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

**Suitable extinguishing media**                      Water. Foam. Carbon dioxide (CO<sub>2</sub>). Dry chemicals.

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**Unsuitable extinguishing media** Do not use water jet as an extinguisher, as this will spread the fire.

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

**Specific hazards** Irritating gases or vapours. Dust or gas may ignite by flames. Containers can burst violently or explode when heated, due to excessive pressure build-up.

**Hazardous combustion products** Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

## **5.3. Advice for firefighters**

**Protective actions during firefighting** Keep up-wind to avoid fumes. Fight advanced or massive fires from safe distance or protected location. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks due to fire. Avoid inhalation of materials or combustion by-products.

**Special protective equipment for firefighters** Use protective equipment appropriate for surrounding materials.

## **SECTION 6: Accidental release measures**

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

**Personal precautions** Wear protective clothing as described in Section 8 of this safety data sheet. Avoid heat, flames and other sources of ignition. Keep upwind. Stop leak if possible without risk. Move containers from fire area if it can be done without risk.

### **6.2. Environmental precautions**

**Environmental precautions** Store away from waterwork or drainage system. Prevent run-off from entering ground, storm sewers and ditches which lead to natural waterways. If large spills, call emergency services to get advice.

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

**Methods for cleaning up** Small Spillages: Collect spilled material in appropriate container for disposal. Large Spillages: Avoid lowland and keep upwind. Dispose of contents/containers in accordance with local/regional/national/international regulations.

### **6.4. Reference to other sections**

**Reference to other sections** For personal protection, see Section 8. For waste disposal, see section 13.

## **SECTION 7: Handling and storage**

### **7.1. Precautions for safe handling**

**Usage precautions** Wear protective clothing as described in Section 8 of this safety data sheet. Provide adequate ventilation. Avoid contact with skin and eyes. Avoid heat, flames and other sources of ignition. Wash thoroughly after handling. Handle and open container with care.

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

**Storage precautions** Keep container tightly sealed when not in use. Do not store near heat sources or expose to high temperatures. Protect against direct sunlight. Store and handle in accordance with all current regulations and standards.

### **7.3. Specific end use(s)**

**Specific end use(s)** Not available.

## **SECTION 8: Exposure Controls/personal protection**

### **8.1. Control parameters**

#### **Occupational exposure limits**

**ACGIH**

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**Ingredient comments** No exposure limits known for ingredient(s).

## 8.2. Exposure controls

### Protective equipment



### Appropriate engineering controls

Provide adequate general and local exhaust ventilation.

### Eye/face protection

The following protection should be worn: Chemical splash goggles.

### Hand protection

Wear suitable gloves.

### Other skin and body protection

Wear suitable protective clothing.

### Hygiene measures

Use engineering controls to reduce air contamination to permissible exposure level. Provide eyewash station and safety shower. Wash hands after handling.

### Respiratory protection

If ventilation is inadequate, suitable respiratory protection must be worn. Under frequent use or heavy exposure, respiratory protection may be needed.

## SECTION 9: Physical and Chemical Properties

### 9.1. Information on basic physical and chemical properties

<b>Appearance</b>	Solid
<b>Colour</b>	Yellow-white.
<b>Odour</b>	Mild.
<b>Odour threshold</b>	Not available. Not available.
<b>pH</b>	Not available.
<b>Melting point</b>	Not applicable.
<b>Initial boiling point and range</b>	Not applicable.
<b>Flash point</b>	246°C
<b>Evaporation rate</b>	Not available.
<b>Upper/lower flammability or explosive limits</b>	Not available.
<b>Other flammability</b>	Not available.
<b>Vapour pressure</b>	Not applicable.
<b>Vapour density</b>	Not available.
<b>Relative density</b>	Not available.
<b>Solubility(ies)</b>	Insoluble in water.
<b>Partition coefficient</b>	Not applicable.
<b>Auto-ignition temperature</b>	> 388°C
<b>Decomposition Temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Explosive properties</b>	Not applicable.
<b>Oxidising properties</b>	Not available.

**9.2. Other information**

Molecular weight Not available.

**SECTION 10: Stability and reactivity****10.1. Reactivity**

Reactivity Not available.

**10.2. Chemical stability**

Stability Stable at normal ambient temperatures and when used as recommended.

**10.3. Possibility of hazardous reactions**

Possibility of hazardous reactions Will not occur.

**10.4. Conditions to avoid**

Conditions to avoid Avoid heat, flames and other sources of ignition. Protect against direct sunlight.

**10.5. Incompatible materials**

Materials to avoid Not available.

**10.6. Hazardous decomposition products**

Hazardous decomposition products Hydrocarbons. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Oxides of carbon. Oxides of nitrogen. Sulphurous gases (SO<sub>x</sub>). Hydrogen cyanide (HCN).

**SECTION 11: Toxicological information****11.1. Information on toxicological effects****Acute toxicity - oral**

Notes (oral LD<sub>50</sub>) Not available.

**Acute toxicity - dermal**

Notes (dermal LD<sub>50</sub>) Not available.

**Acute toxicity - inhalation**

Notes (inhalation LC<sub>50</sub>) Not available.

**Skin corrosion/irritation**

Animal data Not available.

**Serious eye damage/irritation**

Serious eye damage/irritation Not available.

**Germ cell mutagenicity**

Genotoxicity - in vitro Not available.

Genotoxicity - in vivo Not available.

**Carcinogenicity**

Carcinogenicity Not available.

**Reproductive toxicity**

Reproductive toxicity - fertility Not available.

Reproductive toxicity - development Not available.

**Specific target organ toxicity - single exposure**

STOT - single exposure Not available.

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## Specific target organ toxicity - repeated exposure

STOT - repeated exposure Not available.

## SECTION 12: Ecological Information

**Ecotoxicity** There are no data on the ecotoxicity of this product.

### 12.1. Toxicity

**Acute toxicity - fish** Not available.

**Acute toxicity - aquatic invertebrates** Not available.

**Acute toxicity - aquatic plants** Not available.

**Acute toxicity - microorganisms** Not available.

**Acute toxicity - terrestrial** Not available.

**Chronic toxicity - fish early life stage** Not available.

**Short term toxicity - embryo and sac fry stages** Not available.

**Chronic toxicity - aquatic invertebrates** Not available.

### 12.2. Persistence and degradability

**Persistence and degradability** Not available.

**Biodegradation** Not available.

### 12.3. Bioaccumulative potential

**Partition coefficient** Not applicable.

### 12.4. Mobility in soil

**Mobility** Not available.

### 12.5. Results of PBT and vPvB assessment

**Results of PBT and vPvB assessment** This product does not contain any substances classified as PBT or vPvB.

### 12.6. Other adverse effects

**Other adverse effects** Not available.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

**General information** Waste is suitable for incineration. If the waste contains designated waste and difficult to separate, incinerate it or reduce the volume following the similar way as incineration. If applicable, pretreat waste with oil/water separation. Dispose of contents/containers in accordance with local/regional/national/international regulations.

**Disposal methods** Confirm disposal procedures with environmental engineer and local regulations. Dispose of the waste by oneself or contact disposal company.

## SECTION 14: Transport information

**General** The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

**14.1. UN number**

Not applicable.

**14.2. UN proper shipping name**

Not applicable.

**14.3. Transport hazard class(es)**

Not applicable.

**14.4. Packing group**

Not applicable.

**14.5. Environmental hazards**

**Environmentally hazardous substance/marine pollutant**

No.

**14.6. Special precautions for user**

Not applicable.

**14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code**

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

**SECTION 15: Regulatory information**

**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

**Authorisations (Title VII Regulation 1907/2006)** No specific authorisations are known for this product.

**Restrictions (Title VIII Regulation 1907/2006)** No specific restrictions on use are known for this product.

**15.2. Chemical safety assessment**

A chemical safety assessment has been carried out for Resin acids and Rosin acids, potassium salts (CAS:61790-50-9) and Facid (CAS:67701-06-8).

**SECTION 16: Other information**

<b>Issued by</b>	KIST Europe
<b>SDS number</b>	20522
<b>SDS status</b>	Approved.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.