

KUMHO PETROCHEMICAL

SAFETY DATA SHEET KUMHO 1502LL

According to Regulation (EU) No 453/2010

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name KUMHO 1502LL

REACH Registration number -

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

Identified uses Raw materials for rubber products (tires, rubber shoes, sneakers, rubber hoses, 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
Universitaet des Saarlandes
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.

680, Sanggae-dong, Nam-gu
Ulsan, Korea
680-180
Tel : +82-52-259-6051~7
Fax : +82-52-259-6053

1.4. Emergency telephone number

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical and Chemical Hazards	Not classified.
Human health	Not classified.
Environment	Not classified.

Classification (1999/45/EEC) Not classified.

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

2.2. Label elements

Contains SBR (Styrene-Butadiene Copolymer)
Resin acids and Rosin acids, potassium salts
Facid

Label In Accordance With (EC) No. 1272/2008

No pictogram required.

2.3. Other hazards

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

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SBR (Styrene-Butadiene Copolymer)

94-96%

CAS-No.: 9003-55-8

EC No.:

Classification (EC 1272/2008)
Not classified.Classification (67/548/EEC)
Not classified.

Resin acids and Rosin acids, potassium salts

1-5%

CAS-No.: 61790-50-9

EC No.: 263-142-4

Classification (EC 1272/2008)
Not classified.Classification (67/548/EEC)
Not classified.

Facid

1-5%

CAS-No.: 67701-06-8

EC No.:

Classification (EC 1272/2008)
Not classified.Classification (67/548/EEC)
Not classified.

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

REACH Registration number

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SECTION 4: FIRST AID MEASURES**4.1. Description of first aid measures****Inhalation**

Move into fresh air and keep at rest.

If breathing stops, provide artificial respiration.

If respiratory problems, artificial respiration/oxygen.

Get medical attention if any discomfort continues.

Ingestion

Do not give victim anything to drink if he is unconscious.

Rinse mouth thoroughly with water and give large amounts of milk or water to people not unconscious.

Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn't enter the lungs.

Get medical attention if any discomfort continues.

Skin contact

Promptly wash contaminated skin with water. Promptly remove clothing if soaked through and wash the skin with water.

Remove contaminated clothing.

Wash contaminated clothing before reuse.

Get medical attention if any discomfort continues.

Eye contact

Immediately flush with plenty of water for up to 15 minutes. Remove any contact lenses and open eyelids widely. If irritation persists: Seek medical attention and bring along these instructions.

4.2. Most important symptoms and effects, both acute and delayed**General information**

Not available.

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

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

SECTION 5: FIREFIGHTING MEASURES**5.1. Extinguishing media****Extinguishing media**

Carbon dioxide or dry powder. Larger fires: Water. Foam.

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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**Hazardous combustion products**

Carbon monoxide (CO). Carbon dioxide (CO₂). In case of fire, toxic gases may be formed.

Unusual Fire & Explosion Hazards

Dust may form explosive mixture with air. Heat may cause the containers to explode.

Specific hazards

When heated and in case of fire, irritating vapours/gases may be formed. Vapours may be ignited by a spark, a hot surface or an ember.

5.3. Advice for firefighters**Special Fire Fighting Procedures**

Do not scatter spilled material with more water than needed to fight the fire. Water spray should be used to cool containers. Avoid breathing fire vapours. Keep up-wind to avoid fumes. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.

Protective equipment for fire-fighters

Wear protective clothing as described in Section 8 of this safety data sheet.

SECTION 6: ACCIDENTAL RELEASE MEASURES**6.1. Personal precautions, protective equipment and emergency procedures**

Wear protective clothing as described in Section 8 of this safety data sheet. Avoid dust formation. Avoid heat, flames and other sources of ignition. Provide adequate ventilation. Use vapour suppression foam to reduce vapour. Stop leak if possible without risk. DO NOT touch spilled material!

6.2. Environmental precautions

Avoid discharge into drains. Avoid discharge onto the ground. If large spills, call emergency services to get advice.

6.3. Methods and material for containment and cleaning up

Dispose of waste and residues in accordance with local authority requirements. Large Spillages: Build dikes to control spillage. Avoid lowland and keep upwind. Environmental manager must be informed of all major spillages. Collect spillage in containers, seal securely and deliver for disposal according to local regulations. Small Spillages: Collect spilled material in appropriate container for disposal Wash thoroughly after dealing with a spillage.

6.4. Reference to other sections**SECTION 7: HANDLING AND STORAGE****7.1. Precautions for safe handling**

Wear protective clothing as described in Section 8 of this safety data sheet. Provide adequate ventilation. Avoid generating excess dust. Storage tanks and other containers must be grounded. Avoid contact with skin and eyes. Use non sparking handtools and explosion-proof electric equipment. Avoid heat, flames and other sources of ignition. Do not breathe vapour. Do not eat, drink or smoke when using the product.

7.2. Conditions for safe storage, including any incompatibilities

Keep away from heat, sparks and open flame. Avoid exposing to heat and contact with strong oxidising substances. Store in a cool and well-ventilated place.

7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1. Control parameters****Biological Limit Values**

Not applicable.

DNEL

Not available.

PNEC

Not available.

8.2. Exposure controls**Protective equipment**

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Process conditions

Provide eyewash station. Provide eyewash, quick drench.

Engineering measures

Provide adequate general and local exhaust ventilation.

Respiratory equipment

Wear suitable respiratory protection. Suitable respiratory protection must be used at high concentrations. An approved dust respirator is recommended as appropriate depending on dust levels and other workplace factors.

Hand protection

Use suitable protective gloves if risk of skin contact. Where handling at high temperature, wear heat resistant gloves.

Eye protection

If risk of splashing, wear safety goggles or face shield.

Hygiene measures

Wash hands after handling.

Skin protection

Wear apron or protective clothing in case of splashes.

Environmental Exposure Controls

Not available.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Solid
Colour	Ivory
Odour	Mild.
Solubility	Insoluble in water
Initial boiling point and boiling range	Not applicable.
Melting point (°C)	Not applicable.
Relative density	0.92 ~ 0.96
Vapour density (air=1)	Not applicable.
Vapour pressure	Not applicable.
Evaporation rate	Not applicable.
pH-Value, Conc. Solution	Not available.
pH-Value, Diluted Solution	Not available.
Viscosity	Not applicable.
Decomposition temperature (°C)	Not available.
Flash point	246 °C
Auto Ignition Temperature (°C)	> 388 °C
Flammability Limit - Lower(%)	Not available.
Flammability Limit - Upper(%)	Not available.
Partition Coefficient (N-Octanol/Water)	Not applicable.
Other Flammability	Not available.
Mol. Weight	≈ 500, 000

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

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Not applicable.

10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

10.3. Possibility of hazardous reactions

Not applicable.

10.4. Conditions to avoid

Avoid heat, flames and other sources of ignition.

10.5. Incompatible materials**Materials To Avoid**

Not available.

10.6. Hazardous decomposition products

During fire, toxic gases (CO, CO₂) are formed. Hydrocarbons.

SECTION 11: TOXICOLOGICAL INFORMATION**11.1. Information on toxicological effects****Acute toxicity:****Acute Toxicity (Oral LD50)**

Not available.

Acute Toxicity (Dermal LD50)

Not available.

Acute Toxicity (Inhalation LC50)

Not available.

Skin Corrosion/Irritation:

Not available.

Serious eye damage/irritation:

Not available.

Respiratory or skin sensitisation:**Respiratory sensitisation**

Not available.

Skin sensitisation

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.

Specific target organ toxicity - repeated exposure:**STOT - Repeated exposure**

Not available.

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Aspiration hazard:

Not available.

Skin contact

May cause sensitisation by skin contact.

Eye contact

May cause sensitisation by eye contact.

Toxicological information on ingredients.**Resin acids and Rosin acids, potassium salts (CAS: 61790-50-9)****Acute toxicity:****Acute Toxicity (Oral LD50)**

> 2000 mg/kg Rat

Acute Toxicity (Dermal LD50)

> 2000 mg/kg Rat

Acute Toxicity (Inhalation LC50)

Endpoint waived according to REACH Annex VII, IX or XI.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity**Acute Toxicity - Aquatic Invertebrates**

Not available.

Acute Toxicity - Aquatic Plants

Not available.

Acute Toxicity - Microorganisms

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.

Acute Toxicity - Terrestrial

Not available.

Ecological information on ingredients.**Resin acids and Rosin acids, potassium salts (CAS: 61790-50-9)****Acute Toxicity - Fish**

LC50 96 hours 60.3 mg/l Brachydanio rerio (Zebra Fish)

Acute Toxicity - Aquatic Invertebrates

EC50 48 hours 3.8 mg/l Daphnia magna

Acute Toxicity - Aquatic Plants

NOEC 96 hours 0.0125 mg/l Scenedesmus subspicatus

12.2. Persistence and degradability

Not available.

12.3. Bioaccumulative potential**Bioaccumulation factor**

Not available.

Partition coefficient

Not applicable.

12.4. Mobility in soil**Mobility:**

Not available.

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12.5. Results of PBT and vPvB assessment

Not available.

12.6. Other adverse effects

Not available.

SECTION 13: DISPOSAL CONSIDERATIONS**General information**

Only experts should be permitted to carry out disposal of this material.

13.1. Waste treatment methods

Dispose of contents/containers in accordance with local/regional/national/international regulations.

SECTION 14: TRANSPORT INFORMATION**General**

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

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not available.

14.3. Transport hazard class(es)

Not available.

14.4. Packing group

Not available.

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant

No.

14.6. Special precautions for user

Not available.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not available.

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 noted for this product.

Restrictions (Title VIII Regulation 1907/2006)

No specific restrictions of use are noted for this product.

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

Issued By	KIST Europe
Revision Date	21.08.2013
Revision	0
Safety Data Sheet Status	Approved.

KUMHO 1502LL**Disclaimer**

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.