

SAFETY DATA SHEET

Date Updated : 2017-04-25
Version 4.4

Section 1 - Product and Company Information

Product Name: KH-531
[2-(3,4-Epoxy cyclohexyl)ethyl]trimethoxysilane
Company: HUANGSHAN KBR NEW MATERIAL TECHNOLOGY CO.,LTD
Address: YINGBINDADAO, TUNXI DISTRICT, ANHUI, CHINA
Technical Phone: 86-559-2335676
Emergency Phone: 86-559-2335676
Fax: 86-559-2331637

Section 2 - Hazards Identification

Classification of the substance or mixture

According to Regulation (EC) No1272/2008
Carcinogenicity (Category 1B)

According to European Directive 67/548/EEC as amended.
May cause cancer. May cause heritable genetic damage.

Label elements

Labelling according Regulation(EC) 1272-2008

Pictogram



Signal word

Danger

Hazard statement(s)

H340 May cause genetic defects.
H350 May cause cancer.

Precautionary statement(s)

P201 Obtain special instructions before use.
P308 + P313 IF exposed or concerned: Get medical advice/ attention.

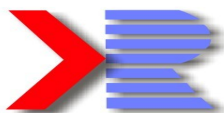
According to European Directive 67/548/EEC as amended.

Hazard symbol(s)



R-phrases(s)

R45 May cause cancer.
R46 May cause heritable genetic damage.



S-phrase(s)

S53 Avoid exposure - obtain special instructions before use.

S23 Do not breathe vapour.

S36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Other hazards - none

Section 3 - Composition/Information on Ingredient

Substance Name: [2-(3,4-Epoxy cyclohexyl)ethyl]trimethoxysilane

Formula: C₁₁H₂₂O₄Si

Molecular Weight : 246.38g/mol

EC-No.: 222-217- 1

Substance Name	CAS-No.	Concentration
[2-(3,4-Epoxy cyclohexyl)ethyl]trimethoxysilane	3388-04-3	≥98.0%
Methanol	67-56-1	≤0.5%
Polymer	NA	≤1.5%

Section 4 - First Aid Measures

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Section 5 - Fire Fighting Measures

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

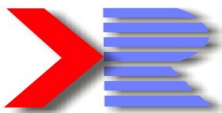
Special protective equipment for fire-fighters

Wear self contained breathing apparatus for fire fighting if necessary.

Section 6 - Accidental Release Measures

Personal precautions

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas.



Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

Methods for cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

Section 7 - Handling and Storage

Handling

Avoid exposure - obtain special instructions before use. Avoid inhalation of vapour or mist.

Normal measures for preventive fire protection.

Storage

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store in cool place.

Moisture sensitive.

Section 8 - Exposure Controls / Personal Protection

Personal protective equipment**Respiratory protection**

Respiratory protection is not required. Where protection is desired, use multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Eye protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

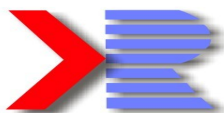
Section 9 - Physical/Chemical Properties

Appearance

Color: Colorless

Form: Clear liquid

Property**Value****At Temperature or Pressure**



Odour	unpleasant	
pH	N/A	
Melting point	N/A	
Boiling point	310°C	760 mmHg
Flash point	146 °C	closed cup
Ignition temperature	N/A	
Refractive Index	1.451	25°C
Lower explosion limit	N/A	
Upper explosion limit	N/A	
Vapour pressure	<7hPa	25°C
Density	1.065	20°C
Relative vapour density	8.48 (Air=1.0)	

N/A = not available

Section 10 - Stability and Reactivity

Storage stability

Stable under recommended storage conditions.

Conditions to avoid

Avoid moisture.

Materials to avoid

Strong oxidizing agents, Amines, Bases.

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, silicon oxides.

Section 11 - Toxicological Information

Acute toxicity

LD50 Oral rat 8528mg/kg

LD50 Dermal rabbit 6716mg/kg

Irritation and corrosion

No data available

Sensitisation

No data available

Chronic exposure

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Signs and Symptoms of Exposure

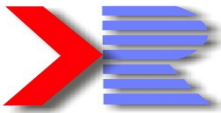
Material may form a siloxane polymer on the skin, eyes, or in the lungs. In the event of direct contact of the liquid with these tissues, seek medical attention. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Potential Health Effects

Inhalation May be harmful if inhaled. May cause respiratory tract irritation.

Ingestion May be harmful if swallowed.

Skin May be harmful if absorbed through skin. May cause skin irritation.



Eyes May cause eye irritation.

Additional Information

RTECS: VV4000000

Section 12 - Ecological Information

Elimination information

No data available.

Ecotoxicity effects

No data available.

Further information on ecology

No data available.

Section 13 - Disposal Considerations

Product

Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging

Dispose of as unused product.

Section 14 - Transport Information

ADR/RID

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

Section 15 - Regulatory Information

ISO 11014-2009 Safety data sheet for chemical products-Content and order of sections.

Regulation(EC) No 1272/2008-Classification, Labelling and Packaging of Substances and Mixtures.

Section 16 - Other Information

Disclaimer

For industrial use only. Not for drug, household or other uses.

Further information

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. KBRCHEM shall not be held liable for any damage resulting from handling or from contact with the above product.
