

# KBRCHEM

## Material Safety Data Sheet

Revision Date: 2021-04-20

HUAGSHAN KBR A-164

### A-164

HUANGSHAN KBR CHEM.

Version: 3.0

Material Safety Data Sheet-compile in accordance with GB / T 16483(2008), GB / T 17519(2013)

#### 1. PRODUCT AND COMPANY IDENTIFICATION

##### 1.1 Name of substance/preparation

Commercial product name: A-164

Chemical name: Methyltrimethoxysilane

##### 1.2 Use of substance/preparation

Industrial, crosslinker for silicone sealant

Intermediate for siloxane manufacture

##### 1.3 Company information

Manufacturer/distributor: HUANGSHAN KBR NEW MATERIAL TECHNOLOGY CO

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##### 1.4 Revision date

2021.04.20

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### 2. HAZARDS IDENTIFICATION

#### 2.1 GHS classification

##### Physical hazard

Flammable liquid Category 2

##### Health hazard

Skin corrosion/irritation Category 2  
Eye irritation/serious damage Category 2B

Environmental hazard not classified

#### 2.2 GHS label element

##### Pictogram

Signal word Danger

##### Hazard statement(s)

H225 Highly flammable liquid and vapor  
H315 Cause skin irritation  
H320 Cause eye irritation

##### Precautionary statement(s)

###### Prevention

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P280 Wear protective gloves and eye/ face protection

###### Reaction

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

###### Storage

P403 + P235 Store in a well-ventilated place. Keep cool.

###### Disposal

P501 Dispose of contents/container in accordance with local regulation.

#### 2.2 Other effects

Chronic: Not available data

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

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### 3.1 Chemical characterization (substance)

Ingredients Name	CAS No.
Methyltrimethoxysilane	1185-55-3

### 3.2 Hazardous ingredients

Chemical name	CAS No.	Concentration
Methyltrimethoxysilane	1185-55-3	≥99.0%
Methyl alcohol	67-56-1	≤1%

## 4. FIRST AID MEASURES

### 4.1 General information

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

### 4.2 After inhalation

Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.

### 4.3 After contact with the skin

Get medical aid. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

### 4.4 After contact with the eyes

Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

### 4.5 After swallowing

Get medical attention.

### 4.6 Protection of first aid rescuer

Rescuer must wear protection gears, such as rubber gloves and air tightness goggles.

## 5. FIRE FIGHTING MEASURES

### 5.1 Flash point

Flash point is about 11°C (Test method: closed cup). Flammable liquid.

### 5.2 Suitable extinguishing media

Alcohol resistant foam, carbon dioxide, dry chemical. Use of high expansion foam (100:1) is recommended to cover flames, sand.

### 5.3 Special hazard

The poisoned smoke can be produced by decomposing when exposed to burning or high temperature.

### 5.4 Specific methods

Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. Use water spray to cool unopened

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containers.

### 5.5 Special protective equipment for fire fighter.

The fire fighter should wear the personal protective gears when covering flame.

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1 Personal precautions

Avoid skin and eye contact. Avoid breathing vapor. Keep container closed. Do not take internally.

### 6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Discharge into the environment must be avoided. Prevent product from entering drains. Do not flush into surface water or sanitary sewer system. Do not allow run-off from fire fighting to enter drains or water courses.

### 6.3 Methods for cleaning up

Remove possible ignition sources. Determine whether to evacuate or isolate the area according to your local emergency plan. Observe all personal protective equipment recommendations described in this MSDS. If diked material can be pumped, store recovered material in appropriate container. Clean up remaining materials from spill with suitable absorbent. Clean area as appropriate since spilled materials, even in small quantities, may present a slip hazard. Final cleaning may require use of steam, solvents or detergents. Dispose of saturated absorbent or cleaning materials appropriately, since spontaneous heating may occur. Laws and regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to determine which laws and regulations are applicable.

## 7. HANDLING AND STORAGE

### 7.1 Handling

Handling in well-ventilated place.

Wear suitable preventive gear.

Avoid inhalation of vapour or mist.

Keep away from sources of heat/fire/hot surface

No smoking. Take measures to prevent the build up of electrostatic charge.

Use antiknock device.

Wash hands and face thoroughly after treatment

Take fire protection measure.

### 7.2 Storage

Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must

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be carefully resealed and kept upright to prevent leakage. Store in cool place.  
Moisture sensitive. Store under inert gas.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### 8.1 Maximum allowable concentration

Chemical name	CAS No.	Maximum allowable concentration
Methyltrimethoxysilane	1185-55-3	See Methyl alcohol comments. China: TWA 25 mg/m <sup>3</sup> . STEL 50 mg/m <sup>3</sup> . Can be absorbed through the skin.
Methyl alcohol	67-56-1	OSHA PEL (final rule): TWA 200 ppm, 260 and ACGIH TLV-skin: TWA200ppm, STEL 250 ppm.

#### 8.2 Engineering control

##### 8.2.1 Personal protection

Eye Protection: Under normal conditions, wear chemical safety glasses or gloves.

If liquid contact is possible, add a full-face shield.

Hand protection: Chemical protective gloves should be worn.

Skin protection: Wash at mealtime and end of shift. Skin contact must be avoided by using impervious protective clothing (glove, aprons, boosted.) Use chemical protective gloves as a minimum and wash skin promptly upon any skin contact.

Hygiene Measures: Remove contaminated clothing immediately . Exercise good industrial hygiene practices. Wash after handling, especially before eating, ringing or smoking.

##### 8.2.2 Environmental protection

Local Ventilation:	Recommended
General Ventilation:	Recommended

### 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state/form.....:	Liquid
Color.....:	Colorless
pH.....:	No data available
Boiling point.....:	102°C at 760mmHg
Melting point.....:	-78°C
Flash point.....:	11°C (tag closed cup)
Ignition temperature.....:	No data available
Oxidizing properties.....:	No
Upper explosion limit.....:	No data available

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Lower explosion limit.....: No data available  
Vapor pressure.....: No data available  
Vapor density.....: No data available  
Density/relative density.....: 0.95g/ml  
Solubility.....: React with water  
Heat of combustion.....: No data available  
Viscosity(dynamic).....: No data available

### 10. STABILITY AND REACTIVITY

#### 10.1 General information

If stored and handled in accordance with standard industrial practices no hazardous reactions are known.

10.2 Chemical stability: Moisture sensitive.

#### 10.3 Reactive

Conditions to avoid: Incompatible materials, ignition sources, excess heat, exposure to moist air.

Decomposition products: Water, moisture or humid air can cause hazardous vapors to form. Can react with strong oxidizing agents.

Hazardous Decomposition Products: Carbon oxides and traces of incompletely burned carbon compounds. Silicon dioxide. Formaldehyde.

Hazardous polymerization: Hazardous polymerization may occur.

### 11. TOXICOLOGICAL INFORMATION

11.1 Route of Exposure: Inhalation, skin contact and accidental ingestion.

11.2 Signs and Symptoms of Overexposure:

Harmful if inhaled.

Maybe harmful if swallowed.

Cause serious eye damage

May cause an allergic skin reaction.

11.3 Acute Toxicity:

Chemical Name	CAS No.	LD50 (Oral)	LD50 (Dermal)	LC50 (Inhalation)
Methyltrimethoxysilane	1185-55-3	12.3 ml/kg (Rat)	> 9,500 mg/kg (Rabbit)	> 42.1 mg/L(Rat; 6 Hrs Vapor)

Potential health hazard:

Eyes: Direct contact may cause temporary redness and discomfort.

Skin: Repeated skin contact may cause allergic skin reaction. Skin absorption may injure the following organ(s): eye - retina, central nervous system.

Ingestion: Ingestion may injure the following organ(s): eye - retina, central nervous system.

Inhalation: Vapor may irritate nose and throat. Inhalation may injure the following organ(s): eye

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-retina, central nervous system. Vapor overexposure may cause drowsiness.

### 11.4 Chronic Toxicity

The toxicity of organic silicon compound is normally low.

11.5 Other Health Hazard Information: This material may liberate methanol upon exposure to moisture or humid air. Overexposure to methanol can result in blindness and nervous system effects.

## 12. ECOLOGICAL INFORMATION

### 12.1 Aquatic and Terrestrial Eco toxicity

Eco toxicity Effects:

Fish:	no data available
Water louse and other aquatic invertebrates:	no data available
Algae:	no data available

### 12.2 Persistence and Degradability Water:

This product hydrolyses in water or moist air, releasing methanol and organosilicons.

12.3 Bio accumulative Potential Bioaccumulation: No data available

12.4 Mobility in Soil: no data available

12.5 Additional Environmental Information: The environmental hazard can not be excluded even after special treatment and disposal.

## 13. DISPOSAL CONSIDERATIONS

Product disposal:	Dispose of in accordance with local regulations.
Packaging disposal:	Dispose of in accordance with local regulations.

## 14. TRANSPORT INFORMATION

Class.....: 3

Packing group.....: II

UN-Number.....: 1993

Description of goods.....: flammable liquid,

N.O.S.( Methyltrimethoxysilane)

Technical name.....: Methyltrimethoxysilane

## 15. REGULATORY INFORMATION

Provisions of the Regulations for the Safe Handling of Chemicals in the Workplace( State Council of the PRC issued on 2011.2.16), particularly those relating to the safe use, production, storage and transportation of dangerous chemicals.

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16. OTHER INFORMATION

Prepared by HUANGSHAN KBR CHEM CO.

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The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The above information relates only to the specific materials designated herein and may not be valid for such materials used in combination with any other materials or in any process or if the material is altered or processed, unless specified in the text.

-End of Material Safety Data Sheet-