

KBRCHEM

Material Safety Data Sheet

Revision Date: 2024-02-05

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P302 + P352 P304 + P340	IF ON SKIN: Wash with plenty of soap and water. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P310 P305 + P351 + P338	Immediately call a POISON CENTER or doctor/ physician. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Storage statement(s) P405	Storage to be locked
Waste disposal P501	Disposal of contents / containers in accordance with local regulations

2.2 Other hazards

None known. Additional ethanol may be formed by reaction with moisture.

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Chemical characterization (substance)

CAS No.	Chemical Name
919-30-2	γ -Aminopropyltriethoxysilane

3.2 Ingredients

Chemical name	CAS No.	Concentration
γ -Aminopropyltriethoxysilane	919-30-2	$\geq 98.50\%$
Ethanol	64-17-5	$\leq 1.50\%$

4. FIRST AID MEASURES

4.1 General information

Take persons to a safe place. Observe self-protection for first aid.

4.2 After inhalation

Move the exposed person to fresh air at once. Keep the patient calm. Protect against loss of body heat. If breathing stops, administer artificial respiration. Seek medical advice immediately and clearly identify substance.

4.3 After contact with the skin

Remove contaminated clothes at once. Wash off with plenty of water or water and soap immediately. In serious cases, use emergency shower immediately. Seek medical advice immediately and clearly identify substance.

4.4 After contact with the eyes

Immediately flush the contaminated eye(s) with lukewarm, gently flowing water for 15-30min while holding the eyelid(s) open. If contact lens is present, DO NOT delays irrigation or attempt to remove

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the lens. Seek medical advice immediately and clearly identify substance. Continue to bathe eyes during transport to medical practitioner.

4.5 After swallowing

If conscious, give several small portions of water to drink. Do not induce vomiting. Seek medical advice immediately and clearly identify substance.

4.6 Advice for the physician

Rescuers are required to wear personal protective equipment such as rubber gloves and airtight goggles.

5. FIRE FIGHTING MEASURES

5.1 Suitable extinguishing media

Water mist, extinguishing powder, alcohol-resistant foam, carbon dioxide, sand.

5.2 Special risks

Be careful, it may break down under burning or high temperature and produce toxic smoke.

5.3 For fighting measures

Depending on the local emergency plan, decide whether to evacuate or isolate the area. Cool the exposed container by water spray.

5.4 Special protective equipment for fire fighting

Wear personal protective equipment when extinguishing the fire.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions

Use personal protective equipment. prevent inhalation of steam, aerosols, or gases. Ensure adequate ventilation.

6.2 Environmental precautions

Prevent material from entering surface waters, drains or sewers and soil. Contain any fluid that runs out using suitable material. Retain contaminated water/extinguishing water.

6.3 Methods for cleaning up

Absorb with a liquid binding material such as diatomaceous earth and dispose of according to local/state/federal regulations. Contain larger amounts and pump up into suitable containers. Clean any slippery coating that remains using a detergent/soap solution or another biodegradable cleaner.

7. HANDLING AND STORAGE

7.1 Handling

Handle in well-ventilated place.

Wear suitable protective gear.

Prevent smoke.

Keep away from heat source / spark / open fire / hot surface.

No smoking.

take measures to prevent electrostatic accumulation.

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Use explosion-proof equipment.
Wash hands and face thoroughly after handling.
Do a good job of fire protection.

7.2 Storage

Store in a cool, well ventilated place. Keep container tightly closed.

The opened container must be carefully re-sealed and maintained in a vertical position to prevent leakage.

Component	CAS No.	Value
γ -Aminopropyltriethoxysilane	919-30-2	No data available

8.2 Exposure limited and controlled

Workplaces are recommended to be separated from other workplaces.
airtight operation to prevent leakage.

Enhanced ventilation.

Set up automatic alarm device and accident ventilation facilities.

Set up emergency evacuation channel and necessary diarrhea risk area.

Set up red area warning line, warning signs and Chinese warning instructions, and set up communication alarm system.

Provide safe shower and eye washing equipment.

8.3 Personal protection

Respiratory protection: use gas mask. according to local and government regulations.

Hand protection: use protective gloves.

Eye protection: use safety protection mirror. Wear a mask if the situation requires.

Skin and body protection: protective clothing. Wear protective boots if needed.

8.4 Environmental protection

Local ventilation Recommendation

Routine ventilation Recommendation

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 General information

Physical state/form.....: liquid

Colour.....: colourless to yellowish

pH.....: 11,3 (500 g/l) (20 °C)

Boiling point.....: 220°C (1013 hPa)

Melting point.....: <-70°C

Flash point.....: 80 - 90 °C (1013 hPa)

Upper explosion limit.....: no data available

Lower explosion limit.....: no data available

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Vapour pressure.....: no data available
Vapour density.....: no data available
Density/relative density.....: 0.95 g/cm (25°C)
Solubility.....: completely miscible in water
Heat of combustion.....: no data available
Viscosity(dynamic).....: no data available

9.2 Other information

Solubility in water: Hydrolytic decomposition occurs. Explosion limits for released ethanol: 3.5-15% (V).

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

Humidity sensitivity.

10.3 Reactivity

Materials to avoid: Oxidizing material can cause a reaction. Water, moisture, or humid air can cause hazardous methanol vapor to form.

Hazardous thermal decomposition: Burning can produce the following combustion products: carbon oxides, oxides of silicon, carbon monoxide is highly toxic if inhaled; carbon dioxide in sufficient concentrations can act as an asphyxiant. Acute overexposure to the products of combustion may result in irritation of the respiratory tract.

Hazardous polymerization: In the face of water, strong acid, heat, may occur polymerization reaction.

11. TOXICOLOGICAL INFORMATION

11.1 Way of infection: inhalation, skin contact and misreading.

11.2 Signs and symptoms of excessive exposure:

If inhalation, it is harmful. If swallowing, it may be harmful. It causes severe eye damage, may cause skin allergies and may cause skin allergic reactions.

11.3 Acute toxicity:

chemical name	CAS no	Half lethal dose LD50 (through mouth)	Half lethal dose LD50 (through skin)	LC50 (swallowing)
γ -Aminopropyltriethoxysilane	919-30-2	3500 mg/kg (mouse)	4000 mg/kg (rabbit)	--

Potential health implications

Inhalation may be harmful, may cause respiratory irritation.

Ingestion is harmful to the human body.

Skin may be harmful if absorbed through the skin. may cause skin irritation.

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The eyes cause eye irritation.

11.4 Chronic toxicity

Silicone compounds are generally less toxic.

11.5 Other health hazards information

This material may be released from methanol in contact with moisture or moist air. excessive methanol can lead to blindness and neurological effects.

Toxicity registration of chemicals: vv6770000

12. ECOLOGICAL INFORMATION

12.1 Ecotoxicity

Species	Method	Exp. time	Result	Source
zebra fish (Brachydaniorerio)	acute	96 h	>934 mg/l (LC50)	literature
Daphnia magna	acute	48 h	331 mg/l (EC50)	literature
Pseudokirchneriella subcapitata	acute	72 h	603 mg/l (EC50)	literature

12.2 Residue/ Degradability

This product is hydrolyzed in water or moist air to release methanol and organosilicon compounds

12.3 Potential bioaccumulation (BCF): no data available

12.4 Mobility in soil: no data available

12.5 Additional information

According to current knowledge adverse effects on water purification plants are not expected.

13. DISPOSAL CONSIDERATIONS

13.1 Material

Dispose of according to regulations by incineration in a special waste incinerator. Observe local/state/federal regulations.

13.2 Unclean packaging

Completely discharge containers (no tear drops, no powder rest, scraped carefully). Containers may be recycled or re-used. Observe local/state/federal regulations.

14. TRANSPORT INFORMATION

Valuation.....: Hazardous product

Class.....: 8

Packing group.....: II

UN-Number.....: 3267

Proper shipping name.....: Corrosive liquid, basic, organic, n.o.s.

Technical name.....: γ -Aminopropyltriethoxysilane

EMS.....: F-A; S-B

15. REGULATORY INFORMATION

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National and local regulations must be observed. label, see the information in this document. (Issued by the State Council on February 16, 2011):corresponding provisions have been made for the safe use, production, storage, transportation, loading and unloading of hazardous chemicals.

16. OTHER INFORMATION

Prepared by HUANSHAN KBR NEW MATERIAL TECHNOLOGY CO.,LTD

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-End of Material Safety Data Sheet-