

SDS According to Regulation (EC) No. 1907/2006

SDS No.: Si-40 V201606

Revision Date: 2016/6/1

SDS Report

Sample Description Silane Coupling Agent CG-504

Applicant Jiangxi Chenguang New Materials Co., Ltd.

Safety Data Sheet

Silane Coupling Agent CG-504

Section1 - Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name: Silane Coupling Agent CG-504

Substance name: Ethyl silicate 40

CAS No.: 11099-06-02

EC-No.: 201-083-8

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

Laboratory chemicals, Manufacture of substances

1.3 Details of the supplier of the safety data sheet

Company: Jiangxi Chenguang New Materials Co., Ltd.

Address: Jinshawan Industrial Area, Jiujiang, Jiangxi, P. R. China

Post Code: 332500

TEL: +86 792 6380888

FAX: + 86 792 6380199

E-mail: cg@cgsilane.com

1.4 Emergency telephone number

TEL: + 86 792 6380888

Section2 – Hazards Identification

2.1 Classification of the substance or mixture

NON-HAZARDOUS SUBSTANCE according to the criteria of NOHSC.

NON-DANGEROUS GOOD according to the ADG Code.

Classification (67/548/EEC, 1999/45/EC):

Not a hazardous substance or mixture.

2.2. Label elements

Labeling (67/548/EEC, 1999/45/EC): No labeling required.

2.3. Other hazards

None known.

Section3 - Composition/information on ingredients

3.1 Ingredients

Chemical Name	Percent(by weight)	CAS No.	EC No.
Ethyl silicate	≥98%	11099-06-02	201-083-8

3.2 Mixtures

Chemical nature : Organic silane

Hazardous components

Remarks : No hazardous ingredients

Section4 – First Aid Measures

4.1 Description of first aid measures

Inhalation

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

Skin contact

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

Eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Ingestion

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

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

No data available

Section5 - Fire Fighting Measures

5.1 Extinguishing media

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

5.2 Special hazards arising from the substance or mixture

Carbon oxides, silicon oxides

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

Under fire conditions, material may decompose to form flammable and/or explosive mixtures in air. Use water spray to cool unopened containers.

Section6 - Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. For personal protection see section 8.

6.2 Environmental precautions

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

6.3 Methods and material for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

6.4 Reference to other sections

For disposal see section 13.

Section7 - Handling and Storage

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition-No smoking. Take measures to prevent the buildup of electrostatic charge.

For precautions see section 2.2

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. 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. Moisture sensitive.

Storage class (TRGS 510): Flammable liquids

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

Section8 – Exposure Controls, Personal Protection

8.1 Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Appropriate engineering controls

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

Personal protective equipment

Eye/face protection

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin 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.

Full contact

Material: Nitrile rubber

Minimum layer thickness:0.4 mm

Break through time: 480 min

Splash contact

Material: Nitrile rubber

Minimum layer thickness:0.2 mm

Break through time: 30 min

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. This recommendation is advisory only and must be evaluated by an industrial hygienist and safety officer familiar with the specific situation of anticipated use by our customers. It should not be construed as offering an approval for any specific use scenario.

Body Protection

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

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

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

Section9 – Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Physical Form: Liquid

Color: colorless

Odor: ester-like

pH: No data available

Melting point/range: -60 °C at ca.1,013 hPa

Initial boiling point and boiling range: approx. 160°C at 1,013hPa

Flash point: 78 °C- Closed Cup,

Evaporation rate: No data available

Flammability (solid, gas): No data available

Lower explosion limit: 1.3 %(V)

Upper explosion limit: 23%(V)

Vapour pressure: < 2.0 hPa at 20 °C

Relative density: 1.040-1.070 g/cm³ at 20 °C

Water solubility: No data available

Partition coefficient (n-octanol/water): not applicable

Thermal decomposition: No data available

Viscosity: 2-5 mPa.S

9.2 Other information

not applicable

Section10 – Stability and Reactivity

10.1 Reactivity

No data available

10.2 Chemical stability

May decompose on exposure to moist air or water.

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

Heat, flames and sparks.

10.5 Incompatible materials

Strong oxidizing agents, Strong acids

10.6 Hazardous decomposition products

By hydrolysis: ethanol

In the event of fire: see section 5.

Section11 – Toxicological Information

11.1 Information on toxicological effects

Acute toxicity LD50 Oral-Rat-> 2,000 mg/kg (OECD Test Guideline 423)

Skin corrosion/irritation Skin-Rabbit Result: No skin irritation (OECD Test Guideline 404)

Serious eye damage/eye irritation No data available

Respiratory or skin sensitization Buehler Test-Guinea pig Did not cause sensitization on laboratory animals. (OECD Test Guideline 406)

Germ cell mutagenicity in vitro assay Chinese hamster ovary cells Result: negative Carcinogenicity

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.

Reproductive toxicity

No data available

Specific target organ toxicity -single exposure

No data available

Specific target organ toxicity -repeated exposure

No data available

Aspiration hazard

No data available

Additional Information

Repeated dose toxicity-Rat-male and female-Gavage-No observed adverse effect level-10 -50 mg/kg

RTECS: VV9450000

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated

Liver-Irregularities-Based on Human Evidence

Section12 – Ecological Information

12.1 Toxicity

No data known.

12.2 Persistence and degradability

Biodegradability aerobic-Exposure time28 d

Result: 98 %-Readily biodegradable

12.3 Bio accumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bio accumulative and toxic (PBT), or very persistent and very bio accumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

No data available

Section 13 – Disposal Considerations

13.1 Waste treatment methods

Product

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

Section 14 – Transport Information

14.1 UN number

Not dangerous good

14.2 UN proper shipping name

Not dangerous good

14.3 Transport hazard class(es)

Not dangerous good

14.4 Packing group

Not dangerous good

14.5 Environmental hazards

Not dangerous good

14.6 Special precautions for user

No data available

Section 15 – Regulatory Information

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

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

Section 16 – Additional Information

Full text of H-Statements referred to under sections 2 and 3.

Acute Tox.	Acute toxicity
Eye Irrit.	Eye irritation
Flam. Liq.	Flammable liquids
STOT SE	Specific target organ toxicity -single exposure

Full text of R-phrases referred to under sections 2 and 3

R10	Flammable.
R20	Harmful by inhalation.
R36/37	Irritating to eyes and respiratory system.

Further information

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 is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.