SAFETY DATA SHEET



1. Identification

Product identifier KE-3479-T

Other means of identification

1774S0 Sales Code Recommended use RTV rubbers

RTV rubber for electrical, electronic and general industry (gluing and sealing)

Recommended restrictions Industrial use only. Manufacturer/Importer/Supplier/Distributor information

Shin-Etsu Silicones of America. Inc. Name 1150 Damar Drive, Akron, OH 44305 USA **Address**

Contact Regulation compliance group

Telephone Number +1-330-630-9860 +1-330-630-9855 **Fax Number**

Emergency Phone Number Chemtrec: +1-800-424-9300 (Within US)

Chemtrec: +1-703-527-3887 (Outside US)

2. Hazard(s) identification

Physical hazards Flammable liquids Category 3 Skin corrosion/irritation Category 2 **Health hazards**

Serious eye damage/eye irritation Category 2A

Environmental hazards Not classified. **OSHA** defined hazards Not classified.

*Hazards not stated here are "Not classified", "Not applicable" or "Classification not possible".

Label elements



Warning Signal word

Hazard statement Flammable liquid and vapor. Causes skin irritation. Causes serious eye irritation.

Precautionary statement

Prevention Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Keep container tightly

closed. Ground/bond container and receiving equipment. Use explosion-proof

electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Wear protective gloves/protective clothing/eye protection/face

protection. Wash thoroughly after handling.

In case of fire: Use water fog, foam, dry chemical powder or carbon dioxide(CO2) to extinguish. IF Response

ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. Take off contaminated

clothing and wash it before reuse.

Storage Store in a well-ventilated place. Keep cool.

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

Hazard(s) not otherwise

classified (HNOC)

None known.

Supplemental information None.

Substance(s) formed under the

This product reacts with water, moisture or humid air to evolve following compounds:

Acetone condition of use

Material name: KE-3479-T SDS US Health: 2 Flammability: 3 Physical hazard: 0

3. Composition/information on ingredients

Mixtures			
Chemical name	Common name and synonyms	CAS number	%
Alkenoxysilane*		Proprietary*	3 - < 5
Organosilane*		Proprietary*	1 - < 3
Alkoxysilane*		Proprietary*	< 1
Decomposition			
Chemical name		CAS number	%
Acetone		67-64-1	

^{*}Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

		4		
4	Fire	t_air	I mas	sures

Inhalation

Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact

Remove contaminated clothing immediately and wash skin with soap and water. For minor skin contact, avoid spreading material on unaffected skin. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

Eye contact

Rinse immediately with plenty of water for at least 15 minutes. Remove contact lenses, if present

and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

Ingestion Rinse mouth. Get medical attention immediately.

Most important Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred symptoms/effects, acute and vision. Skin irritation. May cause redness and pain.

delayed Indication of immediate medical attention and special

Treat symptomatically.

treatment needed

General information En

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media
Unsuitable extinguishing

Water fog. Foam. Carbon dioxide (CO2).

Unsuitable extinguishing media

None known.

Specific hazards arising from the chemical

By heating and fire, harmful vapors/gases may be formed.

Nitrogen oxides. (corrosive)

Special protective equipment and precautions for firefighters

Firefighters must use standard protective equipment including flame retardant coat, helmet, gloves, rubber boots, and self-contained breathing apparatus.

and precautions for firefighte Fire-fighting

Move containers from fire area if you can do so without risk.

equipment/instructions
General fire hazards

Flammable liquid and vapor.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Local authorities should be advised if significant spillages cannot be contained. Do not touch or walk through spilled material. Ventilate closed spaces before entering them. Wear appropriate personal protective equipment.

Methods and materials for containment and cleaning up

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material.

Large Spills: Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.

Small Spills: Clean surface thoroughly to remove residual contamination.

Never return spills in original containers for re-use.

Material name: KE-3479-T sps us

7. Handling and storage

Precautions for safe handling

All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Provide adequate ventilation.

Use care in handling/storage. DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. When using do not smoke. Take precautionary measures against static discharges. Use personal protective equipment as required. Wash hands thoroughly after handling.

Do not breathe mist or vapor. Avoid contact with skin. Avoid contact with eyes. Avoid prolonged exposure.

Conditions for safe storage, including any incompatibilities

Keep away from heat, sparks and open flame. Store in cool place. Store in a well-ventilated place. Keep container tightly closed. Keep out of the reach of children. Store in a cool, dry place out of direct sunlight. Keep in original container.

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Decomposition	Туре	Value	
Acetone (CAS 67-64-1)	PEL	2400 mg/m3	
		1000 ppm	
US. ACGIH Threshold Limit Valu	es		
Decomposition	Туре	Value	
Acetone (CAS 67-64-1)	STEL	750 ppm	
	TWA	500 ppm	
US. NIOSH: Pocket Guide to Che	emical Hazards		
Decomposition	Туре	Value	
Acetone (CAS 67-64-1)	TWA	590 mg/m3	

Biological limit values

ACGIH Biological Exposure Indices

Decomposition	Value	Determinant	Specimen	Sampling Time
Acetone (CAS 67-64-1)	50 mg/l	Acetone	Urine	*

^{* -} For sampling details, please see the source document.

Appropriate engineering controls

Explosion-proof general and local exhaust ventilation. Provide eyewash station.

Pay attention to ventilation such as local exhaust, mechanical and/or door open for at least 24

250 ppm

hours after application.

Individual protection measures, such as personal protective equipment

Eye/face protection Tightly sealed safety glasses according to EN 166.

Skin protection

Hand protection Wear protective gloves.

Other Wear suitable protective clothing.

respiratory protection.

Thermal hazards Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations

When using, do not eat, drink or smoke. Avoid contact with skin. Avoid contact with eyes. Wash hands before breaks and immediately after handling the product. Contaminated work clothing should not be allowed out of the workplace. Handle in accordance with good industrial hygiene and

safety practice.

9. Physical and chemical properties

Appearance

Form Paste.

Color Milk-white, translucent

Odor Acetone odor
Odor threshold Not available.

Material name: KE-3479-T SDS US

pH Not available.Melting point/freezing point Not applicableInitial boiling point and boiling Not applicable

range

Flash point 75.2 °F (24 °C) Closed Cup

Evaporation rate < 1 (Butyl Acetate=1) **Flammability (solid, gas)** Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower

2.1 [Acetone]

(%)

Flammability limit - upper

13.0 [Acetone]

(%)

Explosive limit - lower (%) Not available.

Explosive limit - upper (%) Not available.

Vapor pressure Negligible (25 °C)

Vapor density > 1 (air=1)

Relative density 1.07 (25 °C)

Solubility(ies)

Solubility (water) Not soluble

Partition coefficient Not applicable

(n-octanol/water)

Auto-ignition temperatureNot available.Decomposition temperatureNot available.Viscosity75 Pa·s (25 °C)

Other information

Molecular weight Not applicable

10. Stability and reactivity

ReactivityNo hazardous reaction known under normal conditions of use, storage and transport.

Chemical stability Stable at normal conditions.

Possibility of hazardous

reactions

Hazardous polymerization does not occur.

Conditions to avoid None known.

Incompatible materials Strong oxidizing agents. Water, moisture.

Hazardous decomposition

products

This product reacts with water, moisture or humid air to evolve following compounds:

Acetone.

Thermal breakdown of this product during fire or very high heat condition may evolve the following

hazardous decomposition product:

Carbon oxides and traces of incompletely burned carbon compounds. Silicon dioxide. Nitrogen

oxides. Formaldehyde.

11. Toxicological information

Information on likely routes of exposure

Ingestion Expected to be a low ingestion hazard.

Inhalation No adverse effects due to inhalation are expected.

Skin contact Causes skin irritation.

Eye contact Causes serious eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics

Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred

vision. Skin irritation. May cause redness and pain.

Information on toxicological effects

Acute toxicity

Material name: KE-3479-T sps us

Components **Species Test Results** Alkenoxysilane (CAS Proprietary) **Acute** Oral LD50 Rat > 20 ml/kg Alkoxysilane (CAS Proprietary) **Acute** Dermal LD50 Rabbit 4290 mg/kg Oral LD50 Rat 1570 - 3650 mg/kg 1780 mg/kg Organosilane (CAS Proprietary) **Acute** Oral LD50 Rat 3.67 ml/kg Decomposition **Test Results Species** Acetone (CAS 67-64-1) Acute Inhalation LC50 Rat 50.1 mg/l, 8 Hours Oral LD50 Mouse 3000 mg/kg Rabbit 5340 mg/kg 5800 mg/kg Rat Causes visible necrosis of the skin tissue (Rabbit/60 Minutes) [Organosilane] Skin corrosion/irritation SKIN-RABBIT: 5mg/24Hr SEVERE [Alkoxysilane] Causes serious eye damage. [Organosilane] Serious eye damage/eye EYE-RABBIT: 0.75mg/24Hr SEVERE [Alkoxysilane] irritation Causes serious eye irritation. [Acetone] Respiratory or skin sensitization Respiratory sensitization Not available. Skin sensitization Positive (Guinea pig) [Alkoxysilane] Germ cell mutagenicity Negative(Ames Test) [Alkoxysilane] This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA. Carcinogenicity OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050) Not listed. Reproductive toxicity Not available. Specific target organ toxicity -May cause damage to the following organs. Narcotic effects. [Acetone] single exposure

Specific target organ toxicity -

repeated exposure

Not available.

Aspiration hazard Not available.

Further informationThis product reacts with water , moisture or humid air to evolve following compounds:

Acetone

12. Ecological information

cotoxicity				
Components		Species	Test Results	
Alkoxysilane (CAS F	Proprietary)			
Aquatic				
Fish	LC50	Oryzias latipes	> 1000 mg/l, 48 hr	

Material name: KE-3479-T

Decomposition **Species Test Results**

Acetone (CAS 67-64-1)

Aquatic

Crustacea EC50 Water flea (Daphnia magna) 21.6 - 23.9 mg/l, 48 hours Fish LC50 Fathead minnow (Pimephales promelas) > 100 mg/l, 96 hours

Persistence and degradability Causes easily hydrolysis in water or atmosphere. [Alkoxysilane]

Bioaccumulative potential Not available. Not available. Mobility in soil Not available. Other adverse effects

13. Disposal considerations

Follow applicable Federal, State and Local regulations. **Disposal instructions**

14. Transport information

DOT

UN number UN1993

UN proper shipping name Flammable liquids, n.o.s. (Alkenoxysilane)

Transport hazard class(es)

Class 3 Subsidiary risk _ 3 Label(s) Ш Packing group

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Special provisions B1, B52, IB3, T4, TP1, TP29

Packaging exceptions 150 Packaging non bulk 203 Packaging bulk 242

IATA

UN1993 **UN number**

UN proper shipping name Flammable liquid, n.o.s. (Alkenoxysilane)

3

Transport hazard class(es) Class Subsidiary risk

Ш Packing group **Environmental hazards** No. **ERG Code** 3L

Other information

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Passenger and cargo

aircraft

Allowed.

Cargo aircraft only

Allowed.

IMDG

UN number UN1993

UN proper shipping name FLAMMABLE LIQUID, N.O.S. (Alkenoxysilane)

Transport hazard class(es)

Class 3 Subsidiary risk Ш Packing group **Environmental hazards**

Marine pollutant No. F-E. S-E* **EmS**

Special precautions for user Read safety instructions, SDS and emergency procedures before handling.

Transport in bulk according to This product is not intended to be transported in bulk.

Annex II of MARPOL 73/78 and

the IBC Code



IATA; IMDG



15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

All components are on the U.S. EPA TSCA Inventory List.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

SARA 313 (TRI reporting)

US state regulations

US. Massachusetts RTK - Substance List

Not regulated.

US. New Jersey Worker and Community Right-to-Know Act

Not listed.

US. Pennsylvania Worker and Community Right-to-Know Law

Not listed.

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	No

Material name: KE-3479-T SDS US

Country(s) or region Inventory name On inventory (yes/no)*

Philippines Philippine Inventory of Chemicals and Chemical Substances

(PICCS)

United States & Puerto Rico Toxic Substances Control Act (TSCA) Inventory

Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 03-26-2015

Version # 01

NFPA ratings Health: 2 Flammability: 3

Instability: 0

NFPA ratings



Disclaimer This information is offered in good faith as typical values and not as a product specification. No

warranty, expressed or implied, is hereby made. The recommended industrial hygiene and safe handling procedures are believed to be generally applicable. However, each user should review these recommendations in the specific context of the intended use and determine whether they are

appropriate

This product has been designed, manufactured and developed solely for general industrial use only. This product is not designed for, intended for use as, or suitable for, medical, surgical or other particular purposes. Users have the sole responsibility and obligation to determine the suitability of this product for any application, to make preliminary tests, and to confirm the safety of this product for their use. Users must never use this product for the purpose of implantation into

the human body and/or injection into humans.

Revision Information Product and Company Identification: Product and Company Identification

Composition / Information on Ingredients: Disclosure Overrides

Physical & Chemical Properties: Multiple Properties Toxicological Information: Toxicological Data Regulatory Information: Regulatory Information

GHS: Classification

Material name: KE-3479-T SDS US