
MATERIAL SAFETY DATA SHEET

SECTION 1. COMPANY IDENTIFICATION

COMPANY IDENTIFICATION

MANUFACTURER'S NAME: Shin-Etsu Chemical Co., Ltd.

ADDRESS: 6-1, 2-Chome, Ohtemachi, Chiyodaku, Tokyo, JAPAN

EMERGENCY TELEPHONE NUMBER:

330-630-9860(Shin-Etsu Silicones of America, Inc.)

800-424-9300(CHEMTREC)(24hrs)(Washington, D.C. USA)

TELEPHONE NUMBER FOR INFORMATION:

03-3246-5121(Tokyo, JAPAN)

330-630-9860(Shin-Etsu Silicones of America, Inc.)

DATA PREPARED : 11/14/1995

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BASE NO 4

PRODUCT NAME :

KE-3494

PRODUCT CLASSIFICATION:

One Component Silicone Rubber Compound

SECTION 2. COMPOSITION

SINGLE OR MIXTURE:

Mixture

CHEMICAL IDENTIFICATION:

Organopolysiloxane mixture

HAZARDOUS COMPONENT(S)/(CAS No.):

Crystalline silica/(Confidential) : ca.45 %

Alkenoxysilane/(Confidential)[Flammable Liquid] : ca.5 %

(See Section 8 of this MSDS for Exposure Guideline)

(See Section 11 of this MSDS for Carcinogenicity)

SECTION 3. HAZARDS IDENTIFICATION

HAZARDS CLASSIFICATION:

Flammable Liquids (based on IMO)

Flammable Liquid (based on DOT)

FIRE AND EXPLOSION:

Flammable(But this product does not continue burning and contribute to fire.)

POTENTIAL HEALTH EFFECT:

INHALATION ; Vapor may cause slight irritate nose and

throat. Product generates acetone which may cause irritating to respiratory system and skin. Vapor overexposure may cause drowsiness.

SKIN contact ; On direct contact uncured product or its vapor may cause slight irritation to skin.
EYES contact ; On direct contact uncured product or its vapor may cause slight irritation to eyes.
INGESTION ; No information is available.

SECTION 4. FIRST AID MEASURES

INHALATION ; Remove to fresh air.
SKIN contact ; Immediately remove product from skin with dry cloth or towel, and wash exposed area with detergent.
EYES contact ; Immediately flush with plenty of water for at least 15 minutes and promptly call a physician.
INGESTION ; Wash out mouth with water provided person is conscious. Never give anything by mouth to an unconscious person. Call a physician immediately.

SECTION 5. FIRE FIGHTING MEASURES

FLASH POINT(method used):
13 degrees C (Closed cup)
FLAMMABLE LIMITS:
[Acetone ; decomposed product] LOWER: 2.1% UPPER: 13%
EXTINGUISHING MEDIA:
Foam, dry chemical, carbon dioxide or fine water spray
SPECIAL FIRE FIGHTING PROCEDURE:
None
UNUSUAL FIRE AND EXPLOSION HAZARD:
None

SECTION 6. ACCIDENTAL RELEASE MEASURES

STEP TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:
Shut off all ignition sources.
Contain the spill or leak.
Scrape up with rag or other material and place in container.

SECTION 7. HANDLING AND STORAGE

PRECAUTION TO BE TAKEN IN HANDLING AND STORING:

Keep container closed when not in use.

Store in a cool place.

Keep away from heat, sparks and flame.

Do not lay the container on its side.

Use only with adequate ventilation.

Avoid prolonged breathing vapor.

Avoid contact with eyes and skin.

Contact lens wearers take appropriate precaution.

Keep out of reach of children.

* * * * * Information about the emptied container * * * * *

Do not re-use this container.

This container will be hazardous when emptied.

Residues will be explosive or flammable.

Keep away from heat, sparks and flame.

Do not puncture or cut this container, and do not weld on or near this container.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE GUIDELINES:

ACGIH TLV-TWA : 0.05mg/m³, (RESPIRABLE DUST),

OSHA PEL : 8H TWA 10mg/m³/%SiO₂,
(RESPIRABLE DUST) [Crystalline silica]

ACGIH TLV-TWA : Not established,

OSHA PEL : Not established [Alkenoxysilane]

ACGIH TLV-TWA : 500ppm ; STEL 750ppm,

OSHA PEL : 8H TWA 1000ppm [Acetone ; decomposed product]

RESPIRATORY PROTECTION(specify type):

Use air-supplied breathing apparatus unless local exhaust ventilation is adequate and decomposed product is within TLV and PEL guideline.

VENTILATION:

LOCAL EXHAUST: Required

MECHANICAL(general): Adequate ventilation system

SPECIAL: Unknown

OTHER: Pay attention to ventilation such as local exhaust, mechanical and/or ductwork for at least 24 hours after application.

PROTECTIVE GLOVES:

Plastic film or rubber gloves

EYE PROTECTION:

Safety glasses

OTHER PROTECTIVE CLOTHING OR EQUIPMENT:

Eyewash equipment

WORK/HYGIENIC PRACTICES:

Keep away from heat, sparks and flame.

Avoid prolonged breathing vapor.

Avoid contact with eyes and skin.

Wash hands after handling.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT:

Not applicable

VAPOR PRESSURE:

Negligible (25 degrees C)

VAPOR DENSITY(air=1):

>1

SPECIFIC GRAVITY:

1.38 (25 degrees C)

MELTING POINT:

Not applicable

EVAPORATION RATE:

<1 (Butyl Acetate=1)

SOLUBILITY IN WATER:

Not soluble

APPEARANCE(color):

Gray

APPEARANCE(form):

Paste

ODOR:

Acetone odor

SECTION 10. STABILITY AND REACTIVITY

STABILITY:

Stable

CONDITION TO AVOID:

Exposure to air or moisture until ready to use - Causes curing and acetone vapors form gradually.

INCOMPATIBILITY(material to avoid):

Water or moisture

HAZARDOUS DECOMPOSITION OR BY-PRODUCT:

Water, moisture, or humid air can cause 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. Formaldehyde.

HAZARDOUS POLYMERIZATION:

Will not occur

CONDITION TO AVOID:

None

SECTION 11. TOXICOLOGICAL INFORMATION

SKIN IRRITATION:

No information is available.

EYE IRRITATION:

No information is available.

ACUTE TOXICITY(LD50):

LD50(Oral/Rat) : 5.8g/kg [Acetone ; decomposed product]

ACUTE TOXICITY(LC50):

LC50(Inhalation/Rat) : 50.1g/m³/8Hr
[Acetone ; decomposed product]

CHRONIC TOXICITY:

No information is available.

CARCINOGENICITY:

NTP:Not listed, IARC:Not listed, OSHA REGULATED:Not listed
This product contains crystalline silica which is considered a hazard by inhalation with dust and classified as an agent which is carcinogenic to humans by IARC and may reasonably be anticipated to be carcinogen by NTP. But we consider that this product does not fall under Group 1 in IARC and carcinogen in NTP because it does not generate the dust under normal handling condition.

OTHER INFORMATION:

None

SECTION 12. ECOLOGICAL INFORMATION

BIODEGRADATION:

Not applicable

BIOACCUMULATION:

No information is available.

AQUATIC TOXICITY:

No information is available.

OTHER INFORMATION:

None

SECTION 13. DISPOSAL CONSIDERATIONS

Can be land-filled for cured product or burned in a chemical incinerator equipped with an afterburner and scrubber.
Do not dispose the emptied container unlawfully.
Observe all federal, state, and local laws.

SECTION 14. TRANSPORT INFORMATION

<IMO INFORMATION>

ID No.:

UN 1993

CLASSIFICATION AND CLASS:

Flammable Liquids / Class 3.2



PACKAGING GROUP:

II

PROPER SHIPPING NAME:

Flammable Liquids, N.O.S.

TECHNICAL SHIPPING NAME:

Contains Organosilane

MARINE POLLUTANT:

None

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<DOT INFORMATION>

ID No.(49CFR 172.101):

UN 1993

HAZARD CLASS(49CFR 172.101):

3, Flammable Liquid

PACKING GROUP(49CFR 172.101):

II

PROPER SHIPPING NAME(49CFR 172.101):

Flammable Liquids, N.O.S.

TECHNICAL SHIPPING NAME:

Contains Organosilane

DOT REPORTABLE QUANTITY(49CFR 172.101, APP.) :

HAZARD SUBSTANCE(S) NAME / (CAS No.), CONTENTS AND RQ

Not applicable

SECTION 15. REGULATORY INFORMATION

TOXIC SUBSTANCES CONTROL ACT(TSCA) STATUS:

Listed on the TSCA Inventory.

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EUROPEAN INVENTORY OF EXISTING COMMERCIAL CHEMICAL SUBSTANCES(EINECS) STATUS:

Listed on the EINECS and the ELINCS.

LABELING ACCORDING TO EC-REGULATIONS REQUIRED:

SYMBOL : F

R-PHRASE : (R-11) Highly flammable

S-PHRASE : (S-7) Keep container tightly closed.

(S-25) Avoid contact with eyes.

(S-51) Use only in well-ventilated areas.

CONTAINS : Organosilane ca.5 %

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WGK CLASSIFICATION (Water Resources Act in Germany):

WGK=1

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SUPERFUND AMENDMENTS AND REAUTHORIZAITON ACT OF 1986(SARA) TITLE III SECTION

313 SUPPLIER NOTIFICATION:

This regulation requires submission of annual reports of toxic chemical(s) that appear in section 313 of the emergency planning and community Right-To-Know Act of 1986 and 40 CFR 372. This information must be included in all MSDS's that are



copied and distributed for the material.

The toxic chemical(s) contained in this product are:

CHEMICAL NAME/(CAS No.) AND CONTENTS

** None **

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CALIFORNIA PROPOSITION 65:

This regulation requires a warning for California

Proposition 65 Chemical(s) under the statute.

The California Proposition 65 Chemical(s) contained in this product are:

CHEMICAL NAME/(CAS No.) AND CONTENTS

** None **

We consider that crystalline silica contained in this product does not fall under these chemicals because it does not generate the dust under normal handling condition.

SECTION 16. OTHER INFORMATION

For Industrial Use Only

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This materials safety data sheet is offered solely for your information, consideration and investigation. The data described in this MSDS consist of data on literature, our acquisitional data and analogical inference by data of similar chemical substance or product. Shin-Etsu Chemical Co., Ltd. provides no warranties, either express or implied, and assumes no responsibility for the accuracy or completeness of the data contained herein.
