

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name: KE-40RTV-G

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

General use: Sealing agent
For industrial purposes only

1.3 Details of the supplier of the safety data sheet

Company name: Shin-Etsu Silicones Europe B.V.
Street/POB-No.: Bolderweg 32
Postal Code, city: 1332 AV Almere
Netherlands
Telephone: +31 36-5493-170
Telefax: +31 36-5326-459
Dept. responsible for information:
QA department,
Telephone: +31 36-5493-179, Email: msds_info@shinetsu.nl

1.4 Emergency telephone number

Telephone: +31 36-5493-170
Only available during office hours.

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to EC regulation 1272/2008 (CLP)

Skin Irrit. 2; H315 Causes skin irritation.
Eye Dam. 1; H318 Causes serious eye damage.
Skin Sens. 1; H317 May cause an allergic skin reaction.
Carc. 2; H351 Suspected of causing cancer.

2.2 Label elements

Labelling (CLP)

Signal word: **Danger**Hazard statements: H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H351 Suspected of causing cancer.

Precautionary statements:

- P201 Obtain special instructions before use.
- P261 Avoid breathing mist/vapours/spray.
- P280 Wear protective gloves/protective clothing/eye protection.
- P302+P352 IF ON SKIN: Wash with plenty of water/soap.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P308+P313 IF exposed or concerned: Get medical advice/attention.
- P310 Immediately call a POISON CENTER/doctor.

Special labelling

Text for labelling: Contains: Butan-2-one O,O',O''-(methylsilyldiylne)trioxime, Butan-2-one O,O',O''-(vinylsilyldiylne)trioxime, 2-Butanone oxime (MEKO), 3-Aminopropyltriethoxysilane.

2.3 Other hazards

Under the influence of humidity this product may release further MEKO.

SECTION 3: Composition / information on ingredients

3.1 Substances: not applicable

3.2 Mixtures

Chemical characterisation: Mixture of the substances listed below with non-hazardous additions

Hazardous ingredients:

Ingredient	Designation	Content	Classification
EC No. 238-878-4 CAS 14808-60-7	Quartz (SiO ₂)	25 %	Carc. 2; H351. STOT RE 2; H373.
EC No. 245-366-4 CAS 22984-54-9	Butan-2-one O,O',O''-(methylsilyldiylne) trioxime	1 - 5 %	Skin Irrit. 2; H315. Eye Irrit. 2; H319. Skin Sens. 1; H317.
EC No. 218-747-8 CAS 2224-33-1	Butan-2-one O,O',O''-(vinylsilyldiylne) trioxime	1 - 5 %	Skin Irrit. 2; H315. Eye Dam. 1; H318. Skin Sens. 1; H317.
EC No. 202-496-6 CAS 96-29-7	2-Butanone oxime (MEKO)	(impurity) approx. 1 %	Acute Tox. 4; H312. Eye Dam. 1; H318. Skin Sens. 1; H317. Carc. 2; H351.
REACH 01-2119480479-24-xxxx EC No. 213-048-4 CAS 919-30-2	3- Aminopropyltriethoxysilane	< 1 %	Acute Tox. 4; H302. Skin Corr. 1B; H314. Skin Sens. 1; H317.

Full text of H- and EUH-statements: see section 16.

Additional information: Under the influence of humidity this product may release further MEKO. Quartz (SiO₂) is embedded in the product and not available as respirable dusts. When used as intended or as supplied, the product will not pose hazards of Quartz. Contains Calcium carbonate. The maximum workplace exposure limits are, where necessary, listed in section 8.

SECTION 4: First aid measures

4.1 Description of first aid measures

- General information: First aider: Pay attention to self-protection! Change contaminated clothing.
- In case of inhalation: Move victim to fresh air; if necessary, provide artificial respiration or oxygen. Seek medical treatment in case of troubles.
- Following skin contact: Immediately clean with water and soap followed by thorough rinsing. Seek medical treatment in case of troubles.
- After eye contact: Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing. Subsequently consult an ophthalmologist.
- After swallowing: Rinse mouth immediately and drink plenty of water. Consult physician immediately. Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

Causes serious eye damage. Causes skin irritation. May cause an allergic skin reaction. Suspected of causing cancer.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media:

Water fog, alcohol resistant foam, extinguishing powder, carbon dioxide.

Extinguishing media which must not be used for safety reasons:

High power water jet

5.2 Special hazards arising from the substance or mixture

Combustible. May form dangerous gases and vapours in case of fire. In case of fire may be liberated: Nitrogen oxides (NO_x), silicon dioxide, formaldehyde, traces of incompletely burned carbon compounds, carbon monoxide and carbon dioxide.

5.3 Advice for firefighters

Special protective equipment for firefighters:

Wear a self-contained breathing apparatus and chemical protective clothing.

Additional information: Hazchem-Code: -

Do not allow water used to extinguish fire to enter drains, ground or waterways. Treat runoff as hazardous. You have to dispose of contaminated extinguishing water according to the regulations of the authorities.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid exposure. Keep unprotected people away. Provide adequate ventilation. Do not breathe vapour/aerosol. Wear protective equipment. Avoid contact with skin and eyes.

6.2 Environmental precautions

Do not allow to penetrate into soil, waterbodies or drains.

6.3 Methods and material for containment and cleaning up

Take up mechanically, placing in appropriate containers for disposal. Final cleaning.

Cleaning agent (recommendation): Alcohol.

Additional information: Special danger of slipping by leaking/spilling product.

6.4 Reference to other sections

Refer additionally to section 8 and 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advices on safe handling: Obtain special instructions before use.

When not in use, keep containers tightly closed.

Provide adequate ventilation, and local exhaust as needed.

Do not breathe vapour/aerosol/mist.

Wear protective equipment. Avoid contact with skin and eyes.

Precautions against fire and explosion:

Keep away from sources of ignition. - No smoking. Do not weld.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storerooms and containers:

Keep only in the original container in a cool, well-ventilated place.

Keep container tightly closed. Protect from humidity and water.

Keep away from heat sources, sparks and open flames.

Do not drop, drag or bang the container. Store containers in upright position.

Keep container dry. Do not re-use the empty container.

Further details: Do not return unused portions of product to original container.

Storage class: 11 = Combustible solids

7.3 Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection**8.1 Control parameters**

Occupational exposure limit values:

CAS No.	Designation	Type	Limit value
14808-60-7	Quartz (SiO ₂)	Great Britain: WEL-TWA Ireland: 8 hours	0.1 mg/m ³ (Silica, crystalline; respirable fraction) 0.1 mg/m ³
471-34-1	Calcium carbonate	Great Britain: WEL-TWA Great Britain: WEL-TWA	10 mg/m ³ (inhalable fraction) 4 mg/m ³ (respirable fraction)
96-29-7	2-Butanone oxime (MEKO)	Ireland: 15 minutes Ireland: 8 hours	33 mg/m ³ ; 10 ppm 10 mg/m ³ ; 3 ppm

8.2 Exposure controls

Use in contained systems.

Make sure there is sufficient air exchange and / or that working rooms are air suctioned.

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

Personal protection equipment**Occupational exposure controls**

Respiratory protection: When aerosols and vapours form:

Half-mask with filter according to EN 149. Use filter type A-(P3) according to EN 14387.

The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.

Hand protection: Protective gloves according to EN 374.

Glove material: Fluororubber (Viton).

Layer thickness: 0,7 mm. Breakthrough time: >480 min.

Observe glove manufacturer's instructions concerning penetrability and breakthrough time.

Eye protection: Tightly sealed goggles according to EN 166.

Body protection: Wear suitable protective clothing.

General protection and hygiene measures:

Obtain special instructions before use.

Keep away from heat sources, sparks and open flames.

Do not breathe vapour/aerosol. Avoid contact with skin and eyes.

Take off immediately all contaminated clothing.

When using do not eat, drink or smoke.

Wash hands before breaks and after work.

Work place should be equipped with a shower and an eye rinsing apparatus.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance:	Form: pasty Colour: grey
Odour:	oxime
Odour threshold:	no data available
pH value:	no data available
Melting point/freezing point:	no data available
Initial boiling point and boiling range:	no data available
Flash point/flash point range:	75 °C (c.c.)
Evaporation rate:	(butyl acetate =1) <= 1
Flammability:	no data available
Explosion limits:	no data available
Vapour pressure:	at 25 °C: negligible
Vapour density:	(air =1) >= 1
Density:	at 25 °C: 1.59 g/cm ³
Water solubility:	insoluble
Partition coefficient: n-octanol/water:	no data available
Auto-ignition temperature:	no data available
Thermal decomposition:	no data available
Viscosity, kinematic:	no data available
Explosive properties:	no data available
Oxidizing characteristics:	no data available

9.2 Other information

Additional information: no data available

SECTION 10: Stability and reactivity

10.1 Reactivity

Under the influence of humidity this product releases butanone-oxime (MEKO).

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

10.4 Conditions to avoid

Keep away from heat. Protect from moisture contamination.

10.5 Incompatible materials

Water, humidity, strong oxidizing agents

10.6 Hazardous decomposition products

2-Butanone oxime (MEKO).

In case of fire may be liberated: Nitrogen oxides (NO_x), silicon dioxide, formaldehyde, traces of incompletely burned carbon compounds, carbon monoxide and carbon dioxide.

Thermal decomposition: no data available

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Toxicological effects: Acute toxicity (oral): Lack of data.

Acute toxicity (dermal): Lack of data.

Acute toxicity (inhalative): Lack of data.

Skin corrosion/irritation: Skin Irrit. 2; H315 = Causes skin irritation.

Eye damage/irritation: Eye Dam. 1; H318 = Causes serious eye damage.

Sensitisation to the respiratory tract: Lack of data.

Skin sensitisation: Skin Sens. 1; H317 = May cause an allergic skin reaction.

Germ cell mutagenicity/Genotoxicity: Lack of data.

Carcinogenicity: Carc. 2; H351 = Suspected of causing cancer.

Reproductive toxicity: Lack of data.

Effects on or via lactation: Lack of data.

Specific target organ toxicity (single exposure): Lack of data.

Specific target organ toxicity (repeated exposure): Lack of data.

Aspiration hazard: Lack of data.

Other information: Carcinogenicity: This product contains crystalline silica, which is considered a hazard by inhalation with dust and classified 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 because it does not generate the dust under normal handling operations.

2-Butanone oxime (MEKO, CAS 96-29-7):

LD50 Rat, oral: 3700 mg/kg

LD50 Rat, dermal: 200 - 2000 mg/kg

LC50 Rat, inhalative: 20 mg/L/4h

Limited evidence of a carcinogenic effect.

Liver damage. May produce blood effects.

Risk of serious damage to eyes.

May cause sensitisation by skin contact. Danger of cutaneous absorption. Harmful in contact with skin.

High dose can produce transient and reversible change in neurobehavioral function.

Carcinogenicity: Liver carcinomas were observed in a lifetime inhalation study (ca. 2 years) in which mice and rats were exposed. These carcinomas were statistically increased in males at MEKO concentration of 375 ppm. Relevance to humans is uncertain now.

Mutagenicity: No experimental indications of in vivo mutagenicity exist. No experimental indications of mutagenicity in-vitro exist.

Chronic toxicity: Degenerative effects on the olfactory epithelium of nasal passages occurred in a concentration related manner at MEKO concentration of 15, 75 and 375 ppm.

SECTION 12: Ecological information

12.1 Toxicity

Further details: no data available

12.2. Persistence and degradability

Further details: no data available

12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water:
no data available

12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

no data available

12.6 Other adverse effects

General information: Do not allow to enter into ground-water, surface water or drains.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product

Waste key number: 08 04 09* = Waste adhesives and sealants containing organic solvents or other dangerous substances
MFSU = manufacture, formulation, supply and use
* = Evidence for disposal must be provided.

Recommendation: Special waste. Incinerate according to applicable local, state and federal regulations.

Contaminated packaging

Waste key number: 15 01 04 = Metallic packaging or 150102 = Plastic packaging

Recommendation: Dispose of waste according to applicable legislation.
Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

14.1 UN number

ADR/RID, IMDG, IATA-DGR:
not applicable

14.2 UN proper shipping name

ADR/RID, IMDG, IATA-DGR:
Not restricted

14.3 Transport hazard class(es)

ADR/RID, IMDG, IATA-DGR:

not applicable

14.4 Packing group

ADR/RID, IMDG, IATA-DGR:

not applicable

14.5 Environmental hazards

Marine pollutant:

no

14.6 Special precautions for user

No dangerous good in sense of these transport regulations.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

no data available

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulations - Great Britain**

Hazchem-Code:

-

No data available

15.2 Chemical Safety Assessment

For the following substances of this mixture a chemical safety assessment has been carried out:

CAS-Number 919-30-2

3-Aminopropyltriethoxysilane

SECTION 16: Other information**Further information**

Wording of the H-phrases under paragraph 2 and 3:

H302 = Harmful if swallowed.

H312 = Harmful in contact with skin.

H314 = Causes severe skin burns and eye damage.

H315 = Causes skin irritation.

H317 = May cause an allergic skin reaction.

H318 = Causes serious eye damage.

H319 = Causes serious eye irritation.

H351 = Suspected of causing cancer.

H373 = May cause damage to organs through prolonged or repeated exposure.

Date of first version: 15/1/2016

Department issuing data sheet

Contact person: see section 1: Dept. responsible for information



SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH)
and Regulation (EU) No 2015/830

KE-40RTV-G

Material number KE-40RTV-G

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For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

The information in this data sheet has been established to our best knowledge and was up-to-date at time of revision. It does not represent a guarantee for the properties of the product described in terms of the legal warranty regulations.