

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

1.1 Product identifier

Trade name: KE-445-B

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

General use: One component RTV silicone rubber for general industrial sealing purposes
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

Additional information:

Manufacturer:

Shin-Etsu Chemical Co., Ltd.

6-1, 2-Chome, Ohtemachi, Chiyodaku

Tokyo, Japan

Tel: 03-3246-5345 (Tokyo, Japan)

1.4 Emergency telephone number

Telephone: +31 36-5493-170

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.

Repr. 1B; H360FD May damage fertility. May damage the unborn child.

2.2 Label elements

Labelling (CLP)



Signal word:

Danger

KE-445-B

Material number 332452

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Hazard statements:	H315	Causes skin irritation.
	H317	May cause an allergic skin reaction.
	H318	Causes serious eye damage.
	H351	Suspected of causing cancer.
	H360FD	May damage fertility. May damage the unborn child.
Precautionary statements:		
	P201	Obtain special instructions before use.
	P261	Avoid breathing vapours.
	P264	Wash hands and face thoroughly after handling.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	P281	Use personal protective equipment as required.
	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.
	P405	Store locked up.

Special labelling

Text for labelling: Contains 2-Butanone oxime, Butan-2-one O,O',O''-(vinylsilyldiyl)trioxime and Dibutyltin bis(2-ethylhexanoate).
For professional use only.. Attention - Avoid exposition - Ask for particular instructions before use.

2.3 Other hazards

No risks worthy of mention.

SECTION 3: Composition / information on ingredients

3.1 Substances: not applicable

3.2 Mixtures

Chemical characterisation: Organopolysiloxane mixture

Hazardous ingredients:

Ingredient	Designation	Content	Classification
EC No. 218-747-8 CAS 2224-33-1	Butan-2-one O,O',O''-(vinylsilyldi- trioxime)	< 10 %	Skin Irrit. 2; H315. Eye Dam. 1; H318. Skin Sens. 1; H317.
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.
EC No. 220-481-2 CAS 2781-10-4	Dibutyltin bis(2-ethylhexanoate)	< 1 %	Acute Tox. 3; H301. Repr. 1B; H360FD. Aquatic Chronic 4; H413.
REACH 01-2119471310-51-xxxx EC No. 203-625-9 CAS 108-88-3	Toluene	< 1 %	Flam. Liq. 2; H225. Skin Irrit. 2; H315. Repr. 2; H361d. STOT SE 3; H336. STOT RE 2; H373. Asp. Tox. 1; H304.
REACH 01-2119539477-28-xxxx EC No. 202-496-6 CAS 96-29-7	2-Butanone oxime (MEKO)	(by-product) approx. 1 %	Acute Tox. 4; H312. Eye Dam. 1; H318. Skin Sens. 1; H317. Carc. 2; H351.

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

Additional information: Contains silicon dioxide.
Under the influence of humidity this product releases butanone-oxime (MEKO).
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!

In case of inhalation: Move victim to fresh air. Seek medical treatment in case of troubles.

Following skin contact: Immediately wipe affected skin area with paper towel or cloth.
Wash with generous amount of water and soap. In case of skin irritation, consult a physician.

After eye contact: Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Subsequently consult an ophthalmologist.

After swallowing: Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult physician immediately.

4.2 Most important symptoms and effects, both acute and delayed

Irritant, sensitising

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:

Foam, extinguishing powder, water fog, 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

Emits toxic fumes under fire conditions.

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

5.3 Advice for firefighters

Special protective equipment for firefighters:

Wear self-contained breathing apparatus and protective clothing to protect skin and eyes.

Additional information: Hazchem-Code: -

Cool endangered containers with water spray and, if possible, remove from danger zone.

Use water spray jet to knock down vapours. Do not breathe fumes. Do not allow fire water to penetrate into surface or ground water.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid exposure. Remove all sources of ignition. Provide adequate ventilation.

Avoid contact with skin, eyes, and clothing.

Do not breathe vapours. Wear suitable protective clothing.

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.

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: Avoid exposure - obtain special instructions before use.

When not in use, keep containers tightly closed.

Provide adequate ventilation, and local exhaust as needed.

Avoid contact with skin, eyes, and clothing. Do not breathe vapours.

Wear protective equipment. When using do not eat, drink or smoke.

Precautions against fire and explosion:

Keep away from sources of ignition. - No smoking. Usual measures for fire prevention.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storerooms and containers:

- Keep locked up. Keep container tightly closed in a cool, well-ventilated place.
- Keep away from heat sources, sparks and open flames.
- Protect from humidity and water.
- Store containers in upright position. Do not drop, drag or bang the container.
- Handle empty containers with care. Incineration may cause explosion.
- Do not re-use the empty container. Do not weld.

Hints on joint storage:

Keep away from food, drink and animal feedingstuffs.

Further details:

Only use containers specifically approved for the substance/product.

Storage class:

6.1 C = Combustible substances of acute toxicity, category 3 / hazardous substances that are toxic or produce chronic effects

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
108-88-3	Toluene	Europe: IOELV: STEL	384 mg/m ³ ; 100 ppm (May be absorbed through the skin.)
		Europe: IOELV: TWA	192 mg/m ³ ; 50 ppm (May be absorbed through the skin.)
		Great Britain: WEL-STEL	384 mg/m ³ ; 100 ppm
		Great Britain: WEL-TWA	191 mg/m ³ ; 50 ppm
		Ireland: 15 minutes	384 mg/m ³ ; 100 ppm
		Ireland: 8 hours	192 mg/m ³ ; 50 ppm
96-29-7	2-Butanone oxime (MEKO)	Ireland: 15 minutes	33 mg/m ³ ; 10 ppm
		Ireland: 8 hours	10 mg/m ³ ; 3 ppm

8.2 Exposure controls

- Provide adequate ventilation, and local exhaust as needed.
- Use local exhaust. 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:

- If vapours form, use respiratory protection.
- Use filter type A (= against vapours of organic substances) according to EN 14387.
- If necessary: Wear self-contained breathing apparatus.

Hand protection:

- Protective gloves according to EN 374.
- Glove material: Plastic or rubber
- 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:

Avoid exposure - obtain special instructions before use.
Avoid contact with skin, eyes, and clothing. Change contaminated clothing.
Do not breathe vapours. Wear protective equipment.
Eye wash facility must be provided. When using do not eat, drink or smoke.
Wash hands before breaks and after work.

SECTION 9: Physical and chemical properties**9.1 Information on basic physical and chemical properties**

Appearance:	Form: pasty Colour: black
Odour:	like Oxime
Odour threshold:	no data available
pH value:	not applicable
Melting point/freezing point:	no data available
Initial boiling point and boiling range:	no data available
Flash point/flash point range:	> 62 °C (c.c.); 180 °C (o.c.)
Evaporation rate:	no data available
Flammability:	no data available
Explosion limits:	no data available
Vapour pressure:	at 25 °C: negligible
Vapour density:	no data available
Density:	at 25 °C: 1.05 g/cm ³
Water solubility:	insoluble, water-reactive
Partition coefficient: n-octanol/water:	no data available
Auto-ignition temperature:	no data available
Thermal decomposition:	no data available
Viscosity, dynamic:	at 25 °C:
Explosive properties:	no data available
Oxidizing characteristics:	no data available

9.2 Other information

Additional information:	Relative vapour density (air=1): > 1 Evaporation rate (butyl acetate =1): <1
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SECTION 10: Stability and reactivity**10.1 Reactivity**

With exposure to moisture, product will release 2-Butanone oxime.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No dangerous reactions with proper and specified storage and handling.

10.4 Conditions to avoid

Keep away from heat sources, sparks and open flames.
Protect from moisture contamination.

10.5 Incompatible materials

Water, humidity

10.6 Hazardous decomposition products

2-Butanone oxime (MEKO).

Thermal breakdown of this product during fire or very high heat condition may evolve the following hazardous decomposition products: formaldehyde, silicon dioxide, nitrogen oxides (NO_x), 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: Repr. 1B; H360FD = May damage fertility. May damage the unborn child.
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.

Carcinogenic, germ cell mutagen and reproduction effects:
Repr. Cat. 2 - May impair fertility.
Repr. Cat. 2 - May cause harm to the unborn child.
Carc. Cat. 3 - Limited evidence of a carcinogenic effect.

Other information: Under the influence of humidity this product releases butanone-oxime (MEKO).
Information about 2-Butanone oxime (MEKO):
In an animal experiment, an increase of liver tumors was observed in rodents at a high chronic inhalative exposition. The significance of these results for human beings is not clarified.
Long-term exposure to MEKO may damage the mucous membrane of the nose.
Long-term high dose inhalation of MEKO may cause irreversible damage to health.
May produce blood effects.
High dose can produce transient and reversible change in neurobehavioral function.
no evidence of bioaccumulation
Skin irritations. Expect absorption through the skin.
Skin sensitisation: positive (Guinea pig).
Serious eye damage/irritation.
LD50 Rat, oral: 3,68mg/kg
LC50 Rat, inhalative: >4,8mg/L /4h
Narcotic effect possible.
Limited evidence of a carcinogenic effect.
Mutagenicity: negative (in-vitro, in-vivo).
At Concentration 15, 75, 375 ppm: Degeneration of olfactory epithelia.

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: 07 02 16* = Wastes containing dangerous silicones
* = Evidence for disposal must be provided.

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

Contaminated packaging

Waste key number: 15 01 02 = Plastic packaging
Recommendation: Handle empty containers with care. Incineration may cause explosion.
Do not re-use the empty container.
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 this mixture a chemical safety assessment is not required.

SECTION 16: Other information**Further information**

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

- H225 = Highly flammable liquid and vapour.
- H301 = Toxic if swallowed.
- H302 = Harmful if swallowed.
- H304 = May be fatal if swallowed and enters airways.
- 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.
- H336 = May cause drowsiness or dizziness.
- H351 = Suspected of causing cancer.
- H360FD = May damage fertility. May damage the unborn child.
- H361d = Suspected of damaging the unborn child if inhaled.
- H373 = May cause damage to central nervous system through prolonged or repeated exposure via inhalation.
- H413 = May cause long lasting harmful effects to aquatic life.

Reason of change: General revision (Regulation (EU) No 2015/830)

Date of first version: 29/7/2009

Department issuing data sheet

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

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.