

# SAFETY DATA SHEET

## 1. Identification

**Product identifier:** SILIKOFTAL® HTL

**Chemical name:** Phenyl-Me Polysiloxane Resin

### Other means of identification

**Recommended use:** Industrial use

**Recommended restrictions:** None known.

### Manufacturer/Importer/Distributor Information

Company Name : Evonik Operations GmbH  
Rellinghauser Str. 1-11  
45128 Essen  
Germany

Telephone : +49 201 173 01

Fax : +49 201 173 3000

E-mail : productsafety-cs@evonik.com

### Emergency telephone number:

24-Hour Health : +49 2365 49 2232

Emergency : +49 2365 49 4423 (Fax)

## 2. Hazard(s) identification

### Classification according to GHS

#### Physical Hazards

Flammable liquids Category 3

#### Health Hazards

Skin Corrosion/Irritation Category 2

Serious Eye Damage/Eye Irritation Category 1

Specific Target Organ Toxicity -  
Repeated Exposure Category 2

#### Environmental Hazards

Acute hazards to the aquatic  
environment Category 3

## Label Elements

### Hazard Symbol:



### Signal Word:

Danger

### Hazard Statement:

Flammable liquid and vapor.  
Causes skin irritation.  
Causes serious eye damage.  
May cause damage to organs through prolonged or repeated exposure.  
Harmful to aquatic life.

### Precautionary Statements

#### Prevention:

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion-proof electrical, ventilating and lighting equipment. Use non-sparking tools. Take action to prevent static discharges. Do not breathe dust/fume/gas/mist/vapors/spray. Wash face, hands and any exposed skin thoroughly after handling. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.

#### Response:

IF ON SKIN (or hair): Take off immediately all contaminated clothing and wash it before reuse. Rinse skin with water [or shower]. If skin irritation occurs: Get medical advice/attention. Specific treatment (see supplemental first aid instructions on this label). IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/ physician. IF exposed or concerned: Get medical advice/attention.

#### Storage:

Store in a well-ventilated place. Keep cool. Store locked up.

#### Disposal:

Dispose of contents/ container to an approved facility in accordance with local, regional, national and international regulations.

#### Other hazards:

None known.

## 3. Composition/information on ingredients

### Chemical name:

Phenyl-Me Polysiloxane Resin

## Mixtures

Chemical Identity	Common name and synonyms	CAS number	Content in percent (%)*
xylene, mixture of isomers	No data available.	1330-20-7	10 - <30%
cyclohexanone	No data available.	108-94-1	10 - <30%
ethylbenzene	No data available.	100-41-4	<10%

\* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

The exact concentration has been withheld as a trade secret.

## 4. First-aid measures

### Description of necessary first-aid measures

<b>General information:</b>	Remove soiled or soaked clothing immediately
<b>Inhalation:</b>	If inhaled remove from side of exposure to fresh air, seek medical advice.
<b>Skin Contact:</b>	In case of contact with skin wash off with soap and water. If skin irritation persists, call a physician.
<b>Eye contact:</b>	In case of contact with eyes rinse thoroughly with plenty of water and seek medical advice
<b>Ingestion:</b>	Thoroughly clean the mouth with water In case of discomfort: Supply with medical care.
<b>Personal Protection for First-aid Responders:</b>	No data available.

### Most important symptoms and effects, both acute and delayed

<b>Symptoms:</b>	Risk of serious damage to eyes. Skin irritation
<b>Hazards:</b>	No data available.

### Indication of immediate medical attention and special treatment needed

<b>Treatment:</b>	Treat symptomatically.
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## 5. Fire-fighting measures

### Suitable (and unsuitable) extinguishing media

**Suitable extinguishing media:** foam, carbon dioxide, dry powder, water spray.

<b>Unsuitable extinguishing media:</b>	High volume water jet.
<b>Special hazards arising from the substance or mixture:</b>	In the event of fire the following can be released: - Carbon monoxide, carbon dioxide, silicon dioxide benzene Under certain conditions of combustion traces of other toxic substances cannot be excluded
<b>Special protective equipment and precautions for fire-fighters</b>	
<b>Special fire-fighting procedures:</b>	Keep away from sources of ignition. Take action to prevent static discharges. Vapours may form explosive mixtures with air. Cool endangered containers by water spray
<b>Special protective equipment for fire-fighters:</b>	Do not inhale explosion and/or combustion gases. Use self-contained breathing apparatus and wear protective suit

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures:</b>	Use personal protective equipment. Keep away sources of ignition. Ensure adequate ventilation.
<b>Accidental release measures:</b>	No data available.
<b>Methods and material for containment and cleaning up:</b>	Take up with absorbent material (eg sand, kieselguhr, universal binder) Dispose of absorbed material in accordance with the regulations.
<b>Environmental Precautions:</b>	Do not allow to enter drains or waterways Prevent product from getting into subsoil/soil.

## 7. Handling and storage

### Handling

<b>Technical measures (e.g. Local and general ventilation):</b>	No data available.
<b>Safe handling advice:</b>	Avoid contact with skin and eyes. Do not inhale gases/vapours/aerosols. Provide good ventilation of working area (local exhaust ventilation if necessary). Use respiratory protection during spraying.
<b>Contact avoidance measures:</b>	No data available.

### Storage

<b>Safe storage conditions:</b>	Keep container tightly closed in a cool, well-ventilated place. Keep away from heat.
<b>Safe packaging materials:</b>	No data available.

## 8. Exposure controls/personal protection

### Control Parameters

#### Occupational Exposure Limits

Observe national threshold limit values.

#### Biological Limit Values

Observe national threshold limit values.

#### Appropriate Engineering Controls

No data available.

#### Individual protection measures, such as personal protective equipment

##### General information:

No data available.

##### Eye/face protection:

Safety glasses

#### Skin Protection

##### Hand Protection:

Material: Butyl rubber.  
 Break-through time: 60 min  
 Glove thickness: 0,4 mm

##### Other:

protective clothing

##### Respiratory Protection:

in case of formation of vapours/aerosols: Short term: filter apparatus, combination filter A-P2

##### Hygiene measures:

Wash hands before breaks and immediately after handling the product. When using do not eat, drink or smoke. Remove soiled or soaked clothing immediately.

## 9. Physical and chemical properties

### Information on basic physical and chemical properties

#### Appearance

##### Physical state:

liquid

##### Form:

liquid

##### Color:

yellowish

##### Odor:

solvent-like

##### Odor Threshold:

not measured

##### Freezing point:

not measured

##### Boiling Point:

not measured

##### Flammability:

not measured

#### Upper/lower limit on flammability or explosive limits

##### Explosive limit - upper:

not measured

##### Explosive limit - lower:

not measured

##### Flash Point:

75 °F/24 °C (DIN 53213)

##### Self Ignition Temperature:

not measured

<b>Decomposition Temperature:</b>	not measured
<b>pH:</b>	5 - 7 (100 g/l, 25 °C) in Water
<b>Viscosity</b>	
<b>Dynamic viscosity:</b>	Approximate 1.300 mPa.s (77 °F/25 °C, DIN 53019)
<b>Kinematic viscosity:</b>	Approximate 1182 mm <sup>2</sup> /s (77 °F/25 °C, calculated)
<b>Flow Time:</b>	No data available.
<b>Solubility(ies)</b>	
<b>Solubility in Water:</b>	not measured
<b>Solubility (other):</b>	not measured
<b>Partition coefficient (n-octanol/water):</b>	not measured
<b>Vapor pressure:</b>	not measured
<b>Relative density:</b>	not measured
<b>Density:</b>	Approximate 1,1 g/cm <sup>3</sup> (77 °F/25 °C)
<b>Bulk density:</b>	No data available.
<b>Relative vapor density:</b>	not measured

#### Other information

<b>Explosive properties:</b>	not measured
<b>Oxidizing properties:</b>	not oxidizing
<b>Minimum ignition temperature:</b>	not measured
<b>Metal Corrosion:</b>	Not corrosive to metals
<b>Evaporation Rate:</b>	not measured

### 10. Stability and reactivity

<b>Reactivity:</b>	see section "Possibility of hazardous reactions".
<b>Chemical Stability:</b>	The product is stable under normal conditions.
<b>Possibility of hazardous reactions:</b>	Hydrolysis may result in formation of methanol depending on the specific conditions of use.
<b>Conditions to avoid:</b>	Open flames, sparks or input of much heat
<b>Incompatible Materials:</b>	Not known.
<b>Hazardous Decomposition Products:</b>	Minor amounts of formaldehyde may develop in the presence of air and at temperatures > 150°C. experiments indicate that small amounts of benzene are evolved when heated to approx. 180°C and above.

### 11. Toxicological information

#### Information on toxicological effects

#### Information on likely routes of exposure

**Inhalation:** Information on effects are given below.

**Skin Contact:** Information on effects are given below.

**Eye contact:** Information on effects are given below.

**Ingestion:** Information on effects are given below.

**Acute toxicity (list all possible routes of exposure)**

**Oral**

**Product:** LD 50 (ATEmix): > 5.000 mg/kg

**Components:**

xylene, mixture of isomers  
 LD 50 (Rat): 3.523 mg/kg  
 LD 50 (Rat): > 4.000 mg/kg

cyclohexanone LD 50 (Rat): 1.620 mg/kg

ethylbenzene LD 50 (Rat): 3.500 mg/kg

**Dermal**

**Product:** LD 50 (ATEmix): > 5.000 mg/kg

**Components:**

xylene, mixture of isomers LD 50 (Rabbit): > 4.200 mg/kg

cyclohexanone LD 50 (Rabbit): 1.100 mg/kg

ethylbenzene LD 50 (Rabbit): 15.400 mg/kg

**Inhalation**

**Product:** LC 50 (ATEmix, 4 h): > 40 mg/l Vapour

**Components:**

xylene, mixture of isomers LC 50 (Rat, 4 h): 27,5 mg/l Vapour No data available., Dusts, mists and fumes

cyclohexanone LC 50 (Rat, 4 h): 11 mg/l Vapour Dusts, mists and fumes, No data available.

ethylbenzene LC 50 (Rat, 4 h): 17,6 mg/l Vapour Dusts, mists and fumes, No data available.

**Repeated dose toxicity**

**Product:** No data available.

**Components:**

xylene, mixture of isomers No data available.

cyclohexanone No data available.

ethylbenzene No data available.

**Skin Corrosion/Irritation**

**Product:** No data available.

**Components:**

xylene, mixture of isomers (Rabbit): Irritating.

cyclohexanone OECD 404 (Rabbit): Irritating.

ethylbenzene (Rabbit): Not irritating

### Serious Eye Damage/Eye Irritation

**Product:** No data available.  
**Components:**  
 xylene, mixture of isomers (Rabbit): Irritating.  
 cyclohexanone OECD 405 (Rabbit): Risk of serious damage to eyes.  
 ethylbenzene (Rabbit): Not irritating

### Respiratory or Skin Sensitization

**Product:** No data available.  
**Components:**  
 xylene, mixture of isomers Local Lymph Node Assay (LLNA), OECD 429 (Mouse): Not a skin sensitizer.  
 cyclohexanone Sensitization test (Guinea Pig): Not a skin sensitizer.  
 ethylbenzene Not a skin sensitizer. Literature

### Carcinogenicity

**Product:** No data available.  
**Components:**  
 xylene, mixture of isomers No data available.  
 cyclohexanone No data available.  
 ethylbenzene No data available.

### Germ Cell Mutagenicity

No data available.

#### In vitro

**Product:** No data available.  
**Components:**  
 xylene, mixture of isomers Chromosomal aberration: negative  
 cyclohexanone sister chromatid exchange assay: negative  
 ethylbenzene No data available.  
 gene mutation test (OECD 476): negative  
 Chromosomal aberration (OECD 473): negative

#### In vivo

**Product:** No data available.  
**Components:**  
 xylene, mixture of isomers dominant lethal test (OECD 478) Dermal (Mouse, Male): negative  
 cyclohexanone dominant lethal test (OECD 478) Intraperitoneal (Mouse, Male): negative  
 ethylbenzene No data available.  
 Micronucleus test (OECD 474) Oral (Mouse, Male): negative  
 unscheduled DNA synthesis assay (OECD 486) Inhalation - vapor (Mouse, Female, Male): negative

### Reproductive toxicity

**Product:** No data available.  
**Components:**  
 xylene, mixture of isomers No data available.



cyclohexanone	No data available.
ethylbenzene	No data available.

**Specific Target Organ Toxicity - Single Exposure**

**Product:** No data available.

**Components:**

xylene, mixture of isomers	Inhalation - vapor: Respiratory system - Category 3 with respiratory tract irritation.
cyclohexanone	No data available.
ethylbenzene	No data available.

**Specific Target Organ Toxicity - Repeated Exposure**

**Product:** No data available.

**Components:**

xylene, mixture of isomers	Oral Inhalation - vapor: Liver - Category 2 May cause damage to organs through prolonged or repeated exposure.
cyclohexanone	No data available.
ethylbenzene	Oral Inhalation - vapor: Ear - Category 2 May cause damage to organs through prolonged or repeated exposure.

**Aspiration Hazard**

**Product:** Not classified

**Components:**

xylene, mixture of isomers	May be fatal if swallowed and enters airways.
cyclohexanone	Not classified
ethylbenzene	May be fatal if swallowed and enters airways.

**Information on health hazards**
**Other hazards**

**Product:** No data available.

**12. Ecological information**
**Ecotoxicity:**
**Acute hazards to the aquatic environment:**
**Fish**

**Product:** No data available.

**Components:**

xylene, mixture of isomers	LC 50 (Oncorhynchus mykiss, 96 h): 2,6 mg/l
cyclohexanone	LC 50 (Pimephales promelas, 96 h): 527 mg/l
ethylbenzene	LC 50 (Atlantic silverside (Menidia menidia), 96 h): 5,1 mg/l salt water NOEC (Atlantic silverside (Menidia menidia), 96 h): 3,3 mg/l salt water LC 50 (Oncorhynchus mykiss, 96 h): 4,2 mg/l

**Aquatic Invertebrates**

**Product:** No data available.

**Components:**

xylylene, mixture of isomers	EC 50 (Daphnia magna, 24 h): 1 mg/l
cyclohexanone	EC 50 (Daphnia magna, 48 h): 820 mg/l
ethylbenzene	LC 50 (Americamysis bahia, 48 h): > 5,2 mg/l salt water EC 50 (Daphnia magna, 48 h): 1,8 - 2,4 mg/l

### Toxicity to Aquatic Plants

**Product:**

No data available.

**Components:**

xylylene, mixture of isomers

EC 50 (Algae (Pseudokirchneriella subcapitata), 72 h): 4,36 mg/l (OECD 201) growth rate

EC 50 (Algae (Pseudokirchneriella subcapitata), 72 h): 2,2 mg/l (OECD 201) Biomass

cyclohexanone  
ethylbenzene

EC 50 (Scenedesmus quadricauda (Green algae), 96 h): 370 mg/l

EC 50 (Algae (Pseudokirchneriella subcapitata), 72 h): 5,4 mg/l (US-EPA-method)

EC 50 (Skeletonema costatum (marine diatom), 72 h): 4,9 mg/l (US-EPA-method) saltwater

### Toxicity to microorganisms

**Product:**

No data available.

**Components:**

xylylene, mixture of isomers

NOEC (activated sludge, 3 h): 157 mg/l (OECD 209)

cyclohexanone  
ethylbenzene

EC 50 (activated sludge, 0,5 h): > 1.000 mg/l (OECD 209)

EC 20 (activated sludge, 0,5 h): Approximate 200 mg/l (OECD 209) EC

50 (activated sludge, 0,5 h): Approximate 600 mg/l (OECD 209)

### Chronic hazards to the aquatic environment:

#### Fish

**Product:**

No data available.

**Components:**

xylylene, mixture of isomers

NOEC (Oncorhynchus mykiss, 56 d): > 1,3 mg/l

NOEC (Oncorhynchus mykiss, 56 d): > 1,3 mg/l

cyclohexanone  
ethylbenzene

No data available.

No data available.

#### Aquatic Invertebrates

**Product:**

No data available.

**Components:**

xylylene, mixture of isomers

NOEC (Ceriodaphnia dubia, 7 d): 1,17 mg/l (US-EPA-method)

NOEC (Ceriodaphnia dubia, 7 d): 0,96 mg/l (US-EPA-method)

EL50 (Daphnia magna, 21 d): 2,9 mg/l (OECD 211)

EC 10 (Daphnia magna, 21 d): 1,91 mg/l (OECD 211)

NOEC (Daphnia magna, 21 d): 1,57 mg/l (OECD 211)

cyclohexanone  
ethylbenzene

No data available.

LC 50 (Ceriodaphnia dubia, 7 d): 3,6 mg/l (US-EPA-method)

IC 50 (Ceriodaphnia dubia, 7 d): 3,3 mg/l (US-EPA-method)

NOEC (Ceriodaphnia dubia, 7 d): 0,96 mg/l (US-EPA-method)

Lowest Observed Effect Concentration (Ceriodaphnia dubia, 7 d): 1,7 mg/l (US-EPA-method)

### Toxicity to Aquatic Plants

**Product:**

No data available.

**Components:**

xylylene, mixture of isomers	NOEC (Algae (Pseudokirchneriella subcapitata), 72 h): 1,3 mg/l (OECD 201) growth rate NOEC (Algae (Pseudokirchneriella subcapitata), 72 h): 0,44 mg/l (OECD 201) Biomass
cyclohexanone	No data available.
ethylbenzene	No data available.

### Toxicity to microorganisms

<b>Product:</b>	No data available.
<b>Components:</b>	
xylylene, mixture of isomers	NOEC (activated sludge, 3 h): 157 mg/l (OECD 209)
cyclohexanone	EC 50 (activated sludge, 0,5 h): > 1.000 mg/l (OECD 209)
ethylbenzene	EC 20 (activated sludge, 0,5 h): Approximate 200 mg/l (OECD 209) EC 50 (activated sludge, 0,5 h): Approximate 600 mg/l (OECD 209)

### Persistence and Degradability

#### Biodegradation

<b>Product:</b>	No data available.
<b>Components:</b>	
xylylene, mixture of isomers	98 % (28 d, OECD 301 F) The product is easily biodegradable., aerobic
cyclohexanone	90 - 100 % (28 d, OECD 301 F) The product is easily biodegradable., aerobic
ethylbenzene	70 - 80 % (28 d, ISO 14593) The product is easily biodegradable., aerobic

#### BOD/COD Ratio

<b>Product:</b>	No data available.
<b>Components:</b>	
xylylene, mixture of isomers	No data available.
cyclohexanone	No data available.
ethylbenzene	No data available.

### Bioaccumulative potential

#### Bioconcentration Factor (BCF)

<b>Product:</b>	No data available.
<b>Components:</b>	
xylylene, mixture of isomers	No data available.
cyclohexanone	No data available.
ethylbenzene	No data available.

#### Partition Coefficient n-octanol / water (log Kow)

<b>Product:</b>	Log Kow: not measured
<b>Components:</b>	
xylylene, mixture of isomers	Log Kow: 3,16 20 °C
cyclohexanone	Log Kow: 0,86
ethylbenzene	Log Kow: 3,6 20 °C (EU Method A.8)

### Mobility in soil:

<b>Product</b>	No data available.
<b>Components:</b>	

xylylene, mixture of isomers	No data available.
cyclohexanone	No data available.
ethylbenzene	No data available.

**Product** No data available.

**Components:**

xylylene, mixture of isomers	No data available.
cyclohexanone	No data available.
ethylbenzene	No data available.

**Other adverse effects:**

**Other hazards**

**Product:** Do not allow to enter soil, waterways or waste water canal.

### 13. Disposal considerations

**Disposal methods:** In accordance with local authority regulations, take to special waste incineration plant

**Contaminated Packaging:** If empty contaminated containers are recycled or disposed of, the receiver must be informed about possible hazards.

### 14. Transport information

**International Regulations**

**IATA-DGR**

UN/ID No.	: UN 1866
Proper shipping name	: Resin solution
Class	: 3
Packing group	: III
Labels	: 3
Packing instruction (cargo aircraft)	: 366
Packing instruction (passenger aircraft)	: 355

**IMDG-Code**

UN number or ID number	: UN 1866
Proper shipping name	: RESIN SOLUTION

Class	: 3
Packing group	: III
Labels	: 3
EmS Code	: F-E, <u>S-E</u>
Marine pollutant	: no
Remarks	: Stowage category A

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

Not applicable for product as supplied.

**Special precautions for user**

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

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

**Issue Date:** 04.03.2019

**Version #:** 2.1

**Further Information:** No data available.

**Revision Information:** Changes since the last version are highlighted in the margin. This version replaces all previous versions.

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