

Product name: SILIKOPON® EF

SAFETY DATA SHEET

Classified in accordance with 29 CFR 1910.1200

1. Identification

Product identifier: SILIKOPON® EF**Other means of identification**

None.

Recommended restrictions**Recommended use:** Industrial use
Restrictions on use: None known.**Manufacturer/Importer/Distributor Information****Company Name** : Evonik Corporation
2 Turner Place
Piscataway, NJ 08854
USA**Telephone** : +1 732 981 5000**E-mail** : product-regulatory-services@evonik.com**Emergency telephone number:****24 Hour Emergency Telephone** : +1 800 424 9300 (CHEMTREC - US & CANADA)
800 681 9531 (CHEMTREC MEXICO)
+1 703 527 3887 (CHEMTREC WORLD)

2. Hazard(s) identification

Hazards for the product as supplied**Health Hazards**

Skin sensitizer Category 1

Environmental Hazards

Chronic hazards to the aquatic environment Category 3

Hazard(s) not otherwise classified (HNOC): None.**Label Elements****Hazard Symbol:**

Product name: SILIKOPON® EF


Signal Word: Warning

Hazard Statement:

 May cause an allergic skin reaction.
 Harmful to aquatic life with long lasting effects.

Precautionary Statements
Prevention:

Avoid breathing dust/fume/gas/mist/vapors/spray. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:

IF ON SKIN: Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention. Specific treatment (see supplemental first aid instructions on this label).

Disposal:

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

3. Composition/information on ingredients

Substances
Composition information of impurities and stabilizers

Chemical Identity	Common name and synonyms	CAS number	Content in percent (%) [*]
4,4'-Isopropylidenedicyclohexanol, oligomeric reaction products with 1-chloro-2,3-epoxypropane		30583-72-3	10 - <20%
octamethylcyclotetrasiloxane		556-67-2	0.01 - <0.1%

^{*} 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 first aid measures
General information:

Remove soiled or soaked clothing immediately

Inhalation:

fresh air supply, consult a doctor if feeling unwell.

Skin Contact:

In case of contact with skin wash off immediately with soap and water In case of discomfort: Supply with medical care.

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Eye contact:	In case of contact with eyes rinse thoroughly with water. In case of discomfort: Supply with medical care.
Ingestion:	Thoroughly clean the mouth with water In case of discomfort: Supply with medical care.
Personal Protection for First-aid Responders:	No data available.

Most important symptoms and effects, both acute and delayed

Symptoms:	Up to now no symptoms are known.
Hazards:	No data available.

Indication of immediate medical attention and special treatment needed

Treatment:	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.
Unsuitable extinguishing media:	High volume water jet.
Special hazards arising from the substance or mixture:	In the event of fire the following can be released: - Carbon monoxide, carbon dioxide, silicon dioxide Under certain conditions of combustion traces of other toxic substances cannot be excluded

Special protective equipment and precautions for firefighters

Special fire fighting procedures:	No specific precautions.
Special protective equipment for fire-fighters:	Do not inhale explosion and/or combustion gases. Self-contained breathing apparatus.

6. Accidental release measures

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

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7. Handling and storage**Handling**

Technical measures:	No data available.
Local/Total ventilation:	No data available.
Safe handling advice:	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.
Contact avoidance measures:	No data available.

Storage

Safe storage conditions:	Keep container tightly closed in a cool, well-ventilated place.
Safe packaging materials:	No data available.

8. Exposure controls/personal protection**Control Parameters****Occupational Exposure Limits**

None of the components have assigned exposure limits.

Biological Limit Values

No biological exposure limits noted for the ingredient(s).

Appropriate Engineering Controls

Good general (mechanical) ventilation should be sufficient to control airborne levels.

Individual protection measures, such as personal protective equipment (PPE)**Eye/face protection:** Safety goggles**Skin Protection****Hand Protection:** Additional Information: gloves made of nitril (NBR), gloves made of butyl (IIR)**Skin and Body Protection:** 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. Remove soiled or soaked clothing immediately. When using do not eat, drink or smoke. Use skin protective preparation as preventive skin protection.

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9. Physical and chemical properties**Information on basic physical and chemical properties****Appearance**

Physical state:	liquid
Form:	liquid
Color:	Pale yellow
Odor:	Characteristic
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:	243 °F/117 °C Method: DIN EN 22719
Auto-ignition temperature:	not measured
Decomposition Temperature:	not measured
pH:	Not applicable

Viscosity

Dynamic viscosity:	1,000 - 2,000 mPa.s (77 °F/25 °C) Method: DIN 53015
Kinematic viscosity:	833 - 1667 mm ² /s (77 °F/25 °C), Method: calculated
Flow Time:	No data available.

Solubility(ies)

Solubility in Water:	Insoluble
Solubility (other):	not measured
Partition coefficient (n-octanol/water):	not measured
Vapor pressure:	not measured
Relative density:	not measured
Density:	1.0 - 1.2 g/cm ³ (77 °F/25 °C) Method: DIN 51757
Bulk density:	No data available.
Relative vapor density:	not measured
Particle characteristics:	Not applicable.

Other information

Explosive properties:	not measured
Oxidizing properties:	not oxidizing
Self-ignition:	not measured

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Metal Corrosion:	Not corrosive to metals
Evaporation Rate:	not measured

10. Stability and reactivity

Reactivity:	see section "Possibility of hazardous reactions".
Chemical Stability:	The product is stable under normal conditions.
Possibility of hazardous reactions:	Hydrolysis may result in formation of methanol depending on the specific conditions of use.
Conditions to avoid:	None with proper storage and handling.
Incompatible Materials:	Not known.
Hazardous Decomposition Products:	None with proper storage and handling.

11. Toxicological information**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.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation:	No data available.
Skin Contact:	No data available.
Eye contact:	No data available.
Ingestion:	No data available.

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

Product:	LD 50, ATEmix, > 5,000 mg/kg
Components:	
4,4'-Isopropylidenedicyclohexanol, oligomeric reaction products with 1-chloro-2,3-epoxypropane	LD 50, Rat, Female, > 2,000 mg/kg, OECD 425
octamethylcyclotetrasiloxane	LD 50, Rat, Male, > 5,000 mg/kg, OECD 401

Dermal

Product:	LD 50, ATEmix, > 5,000 mg/kg
Components:	
4,4'-	LD 50, Rat, Female, Male, > 2,000 mg/kg, OECD 402

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Isopropylidenedicyclohexanol, oligomeric reaction products with 1-chloro-2,3-epoxypropane octamethylcyclotetrasiloxane

Not toxic after single exposure, No classification

LD 50, Rat, Female, Male, > 5,000 mg/kg, OECD 402

Inhalation

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

Components:

4,4'-Isopropylidenedicyclohexanol, oligomeric reaction products with 1-chloro-2,3-epoxypropane octamethylcyclotetrasiloxane

Vapour, Not toxic after single exposure, No data available.

Dust and mist, Not toxic after single exposure, No data available.

LC 50, Rat, Female, Male, 4 h, 36 mg/l, OECD 403, Vapour

Not toxic after single exposure, Dust and mist, No data available.

Repeated dose toxicity

Product: No data available.

Components:

octamethylcyclotetrasiloxane

NOAEC, Rat, Female, Male, Inhalation, Vapour, 5 days/weeks, 6 hours/day, 1.8 mg/l, Subchronic toxicity

LOAEC, Rat, Female, Male, Inhalation, Vapour, 5 days/weeks, 6 hours/day, 8.5 mg/l, chronic

NOAEC, Rat, Female, Male, Inhalation, Vapour, 5 days/weeks, 6 hours/day, 0.36 mg/l, Subacute toxicity

Skin Corrosion/Irritation

Product: No data available.

Components:

4,4'-Isopropylidenedicyclohexanol, oligomeric reaction products with 1-chloro-2,3-epoxypropane octamethylcyclotetrasiloxane

Not irritating, OECD 404, Rabbit

Not irritating, OECD 404, Rabbit

Serious Eye Damage/Eye Irritation

Product: No data available.

Components:

4,4'-Isopropylidenedicyclohexanol, oligomeric reaction products with 1-chloro-2,3-epoxypropane octamethylcyclotetrasiloxane

Not irritating, OECD 405, Rabbit

Not irritating, OECD 405, Rabbit

Respiratory or Skin Sensitization

Product: No data available.

Components:

4,4'-Isopropylidenedicyclohexanol, oligomeric reaction products with 1-chloro-2,3-epoxypropane

Local Lymph Node Assay (LLNA), OECD 429, Mouse, May cause sensitization by skin contact.

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octamethylcyclotetrasiloxane Magnussona i Kligmana., OECD 406, Rabbit, Not a skin sensitizer.
Sensitization test, Human, Not a skin sensitizer.
Maximization Test, OECD 406, Guinea Pig, Not a skin sensitizer.

Carcinogenicity

Product: No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogens present or none present in regulated quantities

ACGIH: US.ACGIH Threshold Limit Values:

No carcinogens present or none present in regulated quantities

US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogens present or none present in regulated quantities

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053), as amended:

No carcinogens present or none present in regulated quantities

Germ Cell Mutagenicity

No data available.

In vitro

Components:

4,4'-Isopropylidenedicyclohexanol, oligomeric reaction products with 1-chloro-2,3-epoxypropane Ames test, OECD 471: , negative

octamethylcyclotetrasiloxane Ames test, OECD 471: , negative
Chromosomal aberration, OECD 473: , negative
gene mutation test, OECD 476: , negative

In vivo

Components:

octamethylcyclotetrasiloxane Micronucleus test, OECD 474, Inhalation - vapor, Rat, negative
Chromosomal aberration, OECD 478, Oral, Rat, negative
Chromosomal aberration, OECD 475, Inhalation - vapor, Rat, Female, Male, negative

Reproductive toxicity

Effects on fertility

Not classified based on available data.

Effects on fetal development

Not classified based on available data.

Reproductive toxicity - Assessment

Product: Reproductive toxicity: No data available.
Teratogenicity: No data available.

Components:

octamethylcyclotetrasiloxane Reproductive toxicity: Suspected of damaging fertility or the unborn child.
Suspected of damaging fertility.

Specific Target Organ Toxicity - Single Exposure

Product: No data available.

Product name: SILIKOPON® EF**Specific Target Organ Toxicity - Repeated Exposure****Product:** No data available.**Aspiration Hazard****Product:** Not classified**Components:**

4,4'- Not classified

Isopropylidenedicyclohexanol, oligomeric reaction products with 1-chloro-2,3-epoxypropane

octamethylcyclotetrasiloxane Not classified

Information on health hazards**Other hazards****Product:** No data available.**12. Ecological information****Ecotoxicity:****Toxicity to Aquatic Plants****Product:** No data available.**Components:**4,4'- NOEC, Algae (*Pseudokirchneriella subcapitata*), 72 h, > 100 mg/l, OECD 201Isopropylidenedicyclohexanol, oligomeric reaction products with 1-chloro-2,3-epoxypropane EC 50, Algae (*Pseudokirchneriella subcapitata*), 72 h, > 100 mg/l, OECD 201octamethylcyclotetrasiloxane EC 50, Algae (*Pseudokirchneriella subcapitata*), 96 h, > 22 µg/l, US-EPA-methodNOEC, Algae (*Pseudokirchneriella subcapitata*), 96 h, < 22 µg/l, US-EPA-methodEC 50, Algae (*Pseudokirchneriella subcapitata*), 96 h, > 22 µg/l, US-EPA-method**Toxicity to microorganisms****Product:** No data available.**Components:**

4,4'- EC 50, activated sludge, 3 h, > 1,000 mg/l, OECD 209

Isopropylidenedicyclohexanol, oligomeric reaction products with 1-chloro-2,3-epoxypropane

Toxicity to soil dwelling organisms**Product:** No data available.**Toxicity to terrestrial organisms****Product:** No data available.**Acute hazards to the aquatic environment:****Fish****Product:** No data available.**Components:**

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4,4'- Isopropylidenedicyclohexanol, oligomeric reaction products with 1-chloro-2,3-epoxypropane octamethylcyclotetrasiloxane	LC 50, Oncorhynchus mykiss, 96 h, Approximate, 11.5 mg/IOECD 203 LC 50, Oncorhynchus mykiss, 96 h, > 22 µg/IUS-EPA-method NOEC, Oncorhynchus mykiss, 96 h, 22 µg/IUS-EPA-method
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Aquatic Invertebrates

Product: Components: 4,4'- Isopropylidenedicyclohexanol, oligomeric reaction products with 1-chloro-2,3-epoxypropane octamethylcyclotetrasiloxane	No data available. EC 50, Daphnia magna, 48 h, 18.3 mg/IOECD 202 NOEC, Daphnia magna, 48 h, 10 mg/IOECD 202 NOEC, Daphnia magna, 48 h, 15 µg/IUS-EPA-method EC 50, Daphnia magna, 48 h, > 15 µg/IUS-EPA-method
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Chronic hazards to the aquatic environment:
Fish

Product: Components: 4,4'- Isopropylidenedicyclohexanol, oligomeric reaction products with 1-chloro-2,3-epoxypropane octamethylcyclotetrasiloxane	No data available. NOEC, Oncorhynchus mykiss, 96 d, 7.5 mg/l NOEC, Oncorhynchus mykiss, 93 d, 4.4 µg/l, US-EPA-method
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Aquatic Invertebrates

Product: Components: 4,4'- Isopropylidenedicyclohexanol, oligomeric reaction products with 1-chloro-2,3-epoxypropane octamethylcyclotetrasiloxane	No data available. NOEC, Daphnia magna, 48 d, 10 mg/l NOEC, Daphnia magna, 21 d, 15 µg/l, EPA OTS 797.1330 Lowest Observed Effect Concentration, Daphnia magna, 21 d, 15 µg/l, EPA OTS 797.1330 EC 50, Daphnia magna, 21 d, > 15 µg/l, EPA OTS 797.1330
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Persistence and Degradability
Biodegradation

Product: Components: 4,4'- Isopropylidenedicyclohexanol, oligomeric reaction products with 1-chloro-2,3-epoxypropane octamethylcyclotetrasiloxane	No data available. 0 %, 28 d, OECD 301 D, The product is not biodegradable., aerobic 3.7 %, 28 d, OECD 310, The product is not biodegradable., aerobic
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BOD/COD Ratio

Product name: SILIKOPON® EF

No data available.

Bioaccumulative potential

Bioconcentration Factor (BCF)

Product: No data available.

Partition Coefficient n-octanol / water (log Kow)

Product: not measured

Components:

4,4'- 3.84

Isopropylidenedicyclohexanol, oligomeric reaction products with 1-chloro-2,3-epoxypropane octamethylcyclotetrasiloxane

6.488, 25.1 °C, OECD 123

Mobility in soil:

Product: No data available.

Results of PBT and vPvB assessment:

No data available.

Other adverse effects:

Additional ecological information

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

Domestic regulation

49 CFR

Not regulated as a dangerous good

International Regulations

UNRTDG

Not regulated as a dangerous good

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

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

Not applicable for product as supplied.

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15. Regulatory information

US Federal Regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

None present or none present in regulated quantities (on the basis of current knowledge of the product composition).

US. Toxic Substances Control Act (TSCA) Section 5(a)(2) Final Significant New Use Rules (SNURs) (40 CFR 721 and 725, Subpt E)

None present or none present in regulated quantities (on the basis of current knowledge of the product composition).

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053), as amended

None present or none present in regulated quantities (on the basis of current knowledge of the product composition).

CERCLA Hazardous Substance List (40 CFR 302.4):

None present or none present in regulated quantities (on the basis of current knowledge of the product composition).

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Respiratory or Skin Sensitization

US. EPCRA (SARA Title III) Section 304 Extremely Hazardous Substances Reporting Quantities and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Hazardous Substances

None present or none present in regulated quantities (on the basis of current knowledge of the product composition).

US. EPCRA (SARA Title III) Section 313 Toxic Chemical Release Inventory (TRI) Reporting

None present or none present in regulated quantities (on the basis of current knowledge of the product composition).

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

None present or none present in regulated quantities (on the basis of current knowledge of the product composition).

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

None present or none present in regulated quantities (on the basis of current knowledge of the product composition).

US State Regulations

US. California Proposition 65

No ingredient requiring a warning under CA Prop 65.

Inventory Status:

US TSCA Inventory:

Included on Inventory.

Canada DSL Inventory List:

Not on Inventory.

Canada NDSL Inventory:

Included on Inventory.

Evonik has submitted a non-Final NSN (New Substance Notification) for this substance.

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

Health	2
Flammability	1
Physical Hazards	0
PERSONAL PROTECTION	
	B

B - Safety Glasses & Gloves

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe; RNP - Rating not possible; *Chronic health effect

Version #: 3.0
Revision Date: 09/03/2025
Date of first report version: 03/13/2019

Abbreviations and acronyms:

AIIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TECI - Thailand Existing Chemicals Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Further Information: No data available.

Revision Information Significant changes since the last version are highlighted in the margin. This

version replaces all previous versions.

Disclaimer:

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