SAFETY DATA SHEET
Classified in accordance 29 CFR 1910.1200

1. Identification

Product identifier: SILIKOPON EF

Chemical name:
Siliconeepoxide resin, solvent-free

Other means of identification

Recommended restrictions

Recommended use: Industrial Use
Restrictions on use: None known.

Manufacturer/Importer/Distributor Information

Company Name: Evonik Corporation
299 Jefferson Road
Parsippany, NJ 07054
USA

Telephone: +1 973 929 8000
Fax: +1 973 929 8042
E-mail: product-regulatory-services@evonik.com

Emergency telephone number:
24-Hour Health: +1 800 424 9300 (CHEMTREC - US & CANADA)
Emergency: +1 800 681 9531 (CHEMTREC MEXICO)
+1 703 527 3887 (CHEMTREC WORLD)

2. Hazard(s) identification

Hazard Classification

Health Hazards
Acute toxicity (Oral) Category 4
Skin sensitizer Category 1

Label Elements

Hazard Symbol:

Signal Word: Warning
Hazard Statement: Harmful if swallowed. 
May cause an allergic skin reaction.

Precautionary Statements

Prevention: Avoid breathing dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves.

Response: IF SWALLOWED: Call a POISON CENTRE/doctor/… if you feel unwell. IF ON SKIN: Wash with plenty of soap and water. Rinse mouth. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

Disposal: Dispose of contents/container to an approved waste disposal plant.

Hazard(s) not otherwise classified (HNOC): None.

3. Composition/information on ingredients

Chemical name: 
Siliconeepoxide resin, solvent-free

Substances

Composition information of impurities and stabilizers

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>CAS number</th>
<th>Content in percent (%)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>4,4’-Isopropylidenecyclohexanol, oligomeric reaction products with 1-chloro-2,3-epoxypropane</td>
<td>30583-72-3</td>
<td>&gt;=10 - &lt;20%</td>
</tr>
<tr>
<td>Methanol</td>
<td>67-56-1</td>
<td>&gt;=0.1 - &lt;1%</td>
</tr>
</tbody>
</table>

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

4. First-aid measures

Description of necessary first-aid measures

General information: Remove soiled or soaked clothing immediately

Inhalation: Ensure supply of fresh air.

Skin Contact: Immediately and thoroughly, wash off with soap and water.

Eye contact: Flush eye immediately and thoroughly while protecting the unhurt eye. If symptoms persist, seek medical attention.

Ingestion: If swallowed, seek medical attention and show MSDS.
Personal Protection for First-aid Responders: As in any fire, wear self-contained breathing apparatus pressure-demand, (MSHA/NIOSH approved or equivalent) and full protective gear.

Most important symptoms/effects, acute and delayed

Symptoms: The following symptoms may occur: - allergic symptoms

Hazards: No data available.

Indication of immediate medical attention and special treatment needed

Treatment: Treat symptomatically.

5. Fire-fighting measures

Suitable (and unsuitable) extinguishing media

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

Unsuitable extinguishing media: Full water jet

Specific hazards arising from the chemical: 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: As in any fire, wear self-contained breathing apparatus pressure-demand, (MSHA/NIOSH approved or equivalent) and full protective gear.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: Use personal protective equipment. Ensure adequate ventilation.

Methods and material for containment and cleaning up: Take up with absorbent material (eg sand, kieselguhr, universal binder) Dispose of absorbed material in accordance with the regulations.

Environmental Precautions: Do not allow to enter drains or waterways Do not discharge into the subsoil/soil.

7. Handling and storage

Handling

Technical measures (e.g. Local and general ventilation): Good general (mechanical) ventilation should be sufficient to control airborne levels.

Safe handling advice: Avoid contact with skin and eyes. Do not inhale gases/vapours/aerosols.Wear respiratory protection when spraying. Provide good ventilation of working area (local exhaust ventilation if necessary).

Contact avoidance measures: No data available.
Hygiene measures: No smoking, eating or drinking allowed when using this product. Wash hands before breaks and at end of work shift. Do not eat, drink or smoke when working.

Storage

Safe storage conditions: Keep container tightly closed and in a 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. Hazardous components without workplace control parameters

Appropriate Engineering Controls

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

Individual protection measures, such as personal protective equipment

Eye/face protection: Use chemical resistant goggles.

Skin Protection

Hand Protection: Additional Information: gloves made of nitril (NBR), gloves made of butyl (IIR)

Skin and Body Protection: Light protective clothing is required.

Respiratory Protection: In case of formation of vapors/aerosols: respiratory protective equipment, cartridge for organic gases and vapors.

Hygiene measures: No smoking, eating or drinking allowed when using this product. Wash hands before breaks and at end of work shift. Do not eat, drink or smoke when working.

9. Physical and chemical properties

Appearance

Physical state: liquid
Form: liquid
Color: light yellow
Odor: Characteristic
Odor Threshold: not determined
pH: Not applicable
Freezing point: not measured
Boiling Point: not measured
Flash Point: 242.6 °F (DIN EN 22719 (DIN 51758))
Evaporation Rate: not determined
Flammability (solid, gas): no data available

Explosive limit - upper (%): not measured
Explosive limit - lower (%): not measured
Vapor pressure: not measured
Vapor density (air=1): not measured
Density: 1.000 - 1.200 g/cm³ (25 °C) (DIN 51757)
Relative density: No data available.
Solubility(ies)
   Solubility in Water: Insoluble
   Solubility (other): not measured
Partition coefficient (n-octanol/water): not measured
Self Ignition Temperature: not determined
Decomposition Temperature: not measured
Kinematic viscosity: No data available.
Dynamic viscosity: 1,000 - 2,000 mPa.s (25 °C, DIN 53015 (Höppler))

Other information
Explosive properties: not determined
Oxidizing properties: not determined
Minimum ignition temperature: not measured
Metal Corrosion: 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: Unknown

Incompatible Materials: Unknown

Hazardous Decomposition Products: None with proper storage and handling.

11. Toxicological information

Information on likely routes of exposure
Inhalation: Relevant route of exposure. Information on effects are given below.
Skin Contact: Relevant route of exposure. Information on effects are given below.
Eye contact: Relevant route of exposure. Information on effects are given below.
Ingestion: If handled correctly, not a relevant route of exposure. 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.
Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral
Product: Acute toxicity estimate: 1,717 mg/kg

Dermal
Product: Acute toxicity estimate: 2,207 mg/kg

Inhalation
Product: Vapour
Acute toxicity estimate: 154.5 mg/l

Repeated dose toxicity
Product: no data available

Skin Corrosion/Irritation
Product: no data available

Serious Eye Damage/Eye Irritation
Product: no data available

Respiratory or Skin Sensitization
Product: no data available

Carcinogenicity
Product: No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:
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

No carcinogens present or none present in regulated quantities

Germ Cell Mutagenicity

In vitro
Product: No data available.

Components:
Methanol bacterial reverse mutation assay (e.g. Ames test) (OECD 471): negative
gene mutation (OECD 476): negative

In vivo
Product: No data available.

Components:
Methanol Micronucleus test (OECD 474) Intraperitoneal injection (Mouse): negative

Reproductive toxicity
Product: No data available.

Specific Target Organ Toxicity - Single Exposure
Product: no data available
Specific Target Organ Toxicity - Repeated Exposure
Product: no data available

Aspiration Hazard
Product: Not classified

Other effects: Possibility of sensitisation through skin contact.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish
Product: No data available.

Aquatic Invertebrates
Product: No data available.

Chronic hazards to the aquatic environment:

Fish
Product: No data available.

Aquatic Invertebrates
Product: No data available.

Toxicity to Aquatic Plants
Product: No data available.

Persistence and Degradability

Biodegradation
Product: No data available.

BOD/COD Ratio
Product: No data available.

Bioaccumulative potential

Bioconcentration Factor (BCF)
Product: No data available.

Partition Coefficient n-octanol / water (log Kow)
Product: Log Kow: not measured

Mobility in soil: No data available.

Components:
4,4’-Isopropylidenedicyclohexanol, oligomeric reaction products with 1-chloro-2,3-epoxypropane
Methanol

No data available.

Other adverse effects: 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.

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.

US. Toxic Substances Control Act (TSCA) Section 5(a)(2) Final Significant New Use Rules (SNURs)
(40 CFR 721, Subpt E)
None present or none present in regulated quantities.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)
None present or none present in regulated quantities.
CERCLA Hazardous Substance List (40 CFR 302.4):

<table>
<thead>
<tr>
<th>Chemical Identity</th>
<th>Reportable quantity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methanol</td>
<td>5000 lbs.</td>
</tr>
<tr>
<td>1-Butanol</td>
<td>5000 lbs.</td>
</tr>
</tbody>
</table>

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories
Acute toxicity (any route of exposure), Respiratory or Skin Sensitization

SARA 302 Extremely Hazardous Substance
None present or none present in regulated quantities.

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

SARA 311/312 Hazardous Chemical

SARA 313 (TRI Reporting)
None present or none present in regulated quantities.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):
None present or none present in regulated quantities.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)
None present or none present in regulated quantities.

US State Regulations

US. California Proposition 65
WARNING: This product can expose you to chemicals including Methanol, which is [are] known to the State of California to cause birth defects or other reproductive harm.

US. New Jersey Worker and Community Right-to-Know Act
No ingredient regulated by NJ Right-to-Know Law present.

US. Massachusetts RTK - Substance List
No ingredient regulated by MA Right-to-Know Law present.

US. Pennsylvania RTK - Hazardous Substances
No ingredient regulated by PA Right-to-Know Law present.

US. Rhode Island RTK
No ingredient regulated by RI Right-to-Know Law present.

Inventory Status:
US TSCA Inventory: Included on Inventory.
Canada DSL Inventory List: Included on Inventory.
Canada NDSL Inventory: Included on Inventory.
16. Other information, including date of preparation or last revision

HMIS Hazard ID

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>2</td>
</tr>
<tr>
<td>Flammability</td>
<td>1</td>
</tr>
<tr>
<td>Physical Hazards</td>
<td>0</td>
</tr>
</tbody>
</table>

Ask supervisor or safety specialist for handling instructions

PERSONAL PROTECTION

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

Issue Date: 03/15/2019
Version #: 1.0
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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