

1 Identification of substance

- **Product details**
- **Trade name:** SILIKAL RE 516 - Komponente A
- **Article number:** RE 516 A
- **Application of the substance / the preparation:** Epoxy resin
- **Manufacturer/Supplier:**
Silikal America
609-B Fertilla Street
Carrollton, GA 30117
Tel.: 770.830.1404
Fax.: 777.830.9213
info@silikalamerica.com
- **Information department:** Silikal America
- **Emergency information:** INFOTRAC 1-800-535-5053

2 Composition/Data on components

- **Chemical characterization**
- **Description:** Mixture of the substances listed below with nonhazardous additions.

· **Dangerous components:**

25068-38-6	reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700) ☒ Xi, ☒ N; R 36/38-43-51/53	25-50%
68609-97-2	oxirane, mono[(C12-14-alkyloxy)methyl] derivs ☒ Xi; R 38-43	2.5-5%
9003-36-5	Bisphenol F - Epichlorhydrinharz (MG < 700) ☒ Xi, ☒ N; R 36/38-43-51/53	2.5-5%

- **Additional information:** For the wording of the listed risk phrases refer to section 16.

3 Hazards identification

· **Hazard description:**



Xi Irritant
N Dangerous for the environment

· **Information pertaining to particular dangers for man and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

R 36/38 Irritating to eyes and skin.

R 43 May cause sensitisation by skin contact.

R 51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Contains epoxy constituents. See information supplied by the manufacturer.

· **Classification system:**

The classification was made according to the latest editions of international substances lists, and expanded upon from company and literature data.

· **NFPA ratings (scale 0 - 4)**



Health = 1
Fire = 1
Reactivity = 0

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· HMIS-ratings (scale 0 - 4)

HEALTH	1	Health = 1
FIRE	1	Fire = 1
REACTIVITY	0	Reactivity = 0

4 First aid measures

- **After inhalation:**
Supply fresh air and to be sure call for a doctor.
In case of unconsciousness place patient stably in side position for transportation.
- **After skin contact:**
Immediately wash with water and soap and rinse thoroughly.
Immediately rinse with water.
- **After eye contact:**
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** If symptoms persist consult doctor.

5 Fire fighting measures

- **Suitable extinguishing agents:**
Water
Foam
Carbon dioxide
Fire-extinguishing powder
Use fire fighting measures that suit the environment.
- **Special hazards caused by the material, its products of combustion or resulting gases:**
Formation of toxic gases is possible during heating or in case of fire.
- **Protective equipment:** Wear self-contained respiratory protective device.
- **Additional information**
Collect contaminated fire fighting water separately. It must not enter the sewage system.

6 Accidental release measures

- **Person-related safety precautions:**
Ensure adequate ventilation
Wear protective clothing.
- **Measures for environmental protection:**
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
- **Measures for cleaning/collecting:**
Dispose of the collected material according to regulations.
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Ensure adequate ventilation.

7 Handling and storage

- **Handling:**
- **Information for safe handling:**
Ensure good ventilation/exhaustion at the workplace.
Prevent formation of aerosols.
- **Information about protection against explosions and fires:** No special measures required.
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store only in the original receptacle.

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- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **Maximum storage temperature:** 25°C

8 Exposure controls and personal protection

- **Additional information about design of technical systems:** No further data; see item 7.
- **Components with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **Personal protective equipment:**
- **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing.
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.
- **Breathing equipment:**
Use suitable respiratory protective device in case of insufficient ventilation.
Filter AX or Organic Vapour Cartridge.
- **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

- **Material of gloves**
Butyl rubber, BR
Nitrile rubber, NBR
Recommended thickness of the material: ≥ 0.6 mm
- **Penetration time of glove material**
The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.
For the mixture of chemicals mentioned below the penetration time has to be at least 480 minutes (Permeation according to EN 374 Part 3: Level 6).
- **Eye protection:**



Tightly sealed goggles

- **Body protection:** Protective work clothing

9 Physical and chemical properties

General Information

Form:	Fluid
Color:	Different according to coloring
Odor:	Characteristic

Change in condition

Melting point/Melting range: Undetermined.

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Boiling point/Boiling range:	Undetermined.
· Flash point:	> 126°C (> 259°F)
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Product does not present an explosion hazard.
· Density at 20°C (68°F):	1.7 g/cm ³
· Solubility in / Miscibility with Water:	Not miscible or difficult to mix.
· Viscosity:	
Dynamic at 20°C (68°F):	2000 mPas
· Solvent content:	
Organic solvents:	0.0 %
· Solids content:	100.0 %

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:**
No decomposition if used according to specifications.
- **Materials to be avoided:** Reacts with alkali, amines and strong acids.
- **Dangerous reactions:**
Reacts with amines.
Reacts with acids, alkalis and oxidizing agents.
- **Dangerous products of decomposition:** No dangerous decomposition products known.
- **Additional information:**
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.

11 Toxicological information

- **Acute toxicity:**

- **LD/LC50 values that are relevant for classification:**

25068-38-6 reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700)

Oral	LD50	>5000 mg/kg (rat)
Dermal	LD50	>2000 mg/kg (rat)

- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Irritating effect.
- **Sensitization:** Sensitization possible through skin contact.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Irritant

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12 Ecological information

- **Ecotoxic effects:**

- **Aquatic toxicity:**

25068-38-6 reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700)

EC50 (48h)	10 mg/l (Daphnia magna)
LC50 (96h)	10 mg/l (fish)

- **Remark:** Toxic for fish

- **General notes:**

Water hazard class 2 (Self-assessment): hazardous for water
 Do not allow product to reach ground water, water course or sewage system.
 Danger to drinking water if even small quantities leak into the ground.
 Also poisonous for fish and plankton in water bodies.
 The material is harmful to the environment.
 Toxic for aquatic organisms

13 Disposal considerations

- **Product:**

- **Recommendation:**

Must be specially treated adhering to official regulations.
 Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- **Uncleaned packagings:**

- **Recommendation:**

Packaging can be reused or recycled after cleaning.
 Packagings that cannot be cleansed are to be disposed of in the same manner as the product.

- **Recommended cleansing agent:**

Alcohol
 Acetone

14 Transport information

- **DOT regulations:**



- **Hazard class:**

9

- **Identification number:**

UN3082

- **Packing group:**

III

- **Proper shipping name (technical name):** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700))

- **Label**

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· Land transport ADR/RID (cross-border):



· ADR/RID class:	9 Miscellaneous dangerous substances and articles
· Danger code (Kemler):	90
· UN-Number:	3082
· Packaging group:	III
· Description of goods:	3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700))

· Maritime transport IMDG:



· IMDG Class:	9
· UN Number:	3082
· Label	9
· Packaging group:	III
· EMS Number:	F-A,S-F
· Marine pollutant:	Yes
· Proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700))

· Air transport ICAO-TI and IATA-DGR:



· ICAO/IATA Class:	9
· UN/ID Number:	3082
· Label	9
· Packaging group:	III
· Proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700))

15 Regulations

· Sara

· Section 355 (extremely hazardous substances):

None of the ingredient is listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

· TSCA (Toxic Substances Control Act):

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68609-97-2 | oxirane, mono[(C12-14-alkyloxy)methyl] derivs

· **Proposition 65**

· **Chemicals known to cause cancer:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for females:**

None of the ingredients is listed.

· **Chemicals known to cause reproductive toxicity for males:**

None of the ingredients is listed.

· **Chemicals known to cause developmental toxicity:**

None of the ingredients is listed.

· **Carcinogenicity categories**

· **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

· **IARC (International Agency for Research on Cancer)**

None of the ingredients is listed.

· **NTP (National Toxicology Program)**

None of the ingredients is listed.

· **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients is listed.

· **MAK (German Maximum Workplace Concentration)**

None of the ingredients is listed.

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

· **Product related hazard informations:**

The product has been classified and marked in accordance with directives on hazardous materials.

· **Hazard symbols:**

Xi Irritant

N Dangerous for the environment

· **Hazard-determining components of labelling:**

reaction product: bisphenol-A-(epichlorhydrin) epoxy resin (number average molecular weight = 700)

Bisphenol F - Epichlorhydrinharz (MG < 700)

oxirane, mono[(C12-14-alkyloxy)methyl] derivs

· **Risk phrases:**

36/38 Irritating to eyes and skin.

43 May cause sensitisation by skin contact.

51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

· **Safety phrases:**

24 Avoid contact with skin.

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

28 After contact with skin, wash immediately with plenty of soap and water.

37/39 Wear suitable gloves and eye/face protection.

46 If swallowed, seek medical advice immediately and show this container or label.

61 Avoid release to the environment. Refer to special instructions/safety data sheets.

· **Special labeling of certain preparations:**

Contains epoxy constituents. See information supplied by the manufacturer.

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- **National regulations:**
- **Water hazard class:** Water hazard class 2 (Self-assessment): hazardous for water.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Department issuing MSDS:** Silikal America
- * **Data compared to the previous version altered.**

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