according to Regulation (EC) No. 1907/2006

# Sikafloor®-381 ECF Part A



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

1.1 Product identifier

Trade name : Sikafloor®-381 ECF Part A

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

Product use : Epoxy coating

1.3 Details of the supplier of the safety data sheet

Company : Sika Limited

Watchmead

Welwyn Garden City Hertfordshire AL7 1BQ United Kingdom

Telephone : +44 (0)1707 394444

1.4 Emergency telephone number

Emergency telephone num-

: +44 (0)1707 363899 (available during office hours)

ber

# **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

Type of product : Mixture

#### Classification (REGULATION (EC) No 1272/2008)

Skin irritation, Category 2 H315: Causes skin irritation.

Eye irritation, Category 2 H319: Causes serious eye irritation.
Skin sensitisation, Category 1 H317: May cause an allergic skin reaction.

Chronic aquatic toxicity, Category 3 H412: Harmful to aquatic life with long lasting ef-

fects.

#### 2.2 Label elements

# Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :

Signal word : Warning

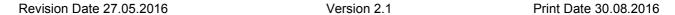
Hazard statements : H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

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H412 Harmful to aquatic life with long lasting ef-

fects.

Precautionary statements : Prevention:

P261 Avoid breathing dust/ fume/ gas/ mist/ va-

pours/ spray.

P273 Avoid release to the environment.

P280 Wear protective gloves/ eye protection/ face

protection.

Response:

P333 + P313 If skin irritation or rash occurs: Get medical

advice/ attention.

P337 + P313 If eye irritation persists: Get medical advice/

attention.

Disposal:

P501 Dispose of contents/ container to an ap-

proved waste disposal plant.

Hazardous components which must be listed on the label:

500-006-8 reaction product: bisphenol F-(epichlorhydrin) epoxy resin (number

average molecular weight <= 700)

222-384-0
 1-(2,3-epoxypropoxy)-2,2-bis[(2,3-epoxypropoxy)methyl]butane

500-033-5 reaction product: bisphenol-A-(epichlorhydrin) and epoxy resin (number

average molecular weight <= 700)

221-453-2 p-tert-butylphenyl 1-(2,3-epoxy)propyl ether

#### **Additional Labelling:**

EUH205 Contains epoxy constituents. May produce an allergic reaction.

#### 2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

#### **SECTION 3: Composition/information on ingredients**

#### 3.2 Mixtures

# **Hazardous components**

Chemical name	Classification	Concentration
CAS-No.	(REGULATION (EC)	[%]
EC-No.	No 1272/2008)	
Registration number		
reaction product: bisphenol F-(epichlorhydrin) epoxy resin	Skin Irrit.2; H315	>= 10 - < 20
(number average molecular weight <= 700)	Skin Sens.1; H317	
9003-36-5	Aquatic Chronic2;	
500-006-8	H411	
01-2119454392-40-XXXX		
1-(2,3-epoxypropoxy)-2,2-bis[(2,3-	Skin Irrit.2; H315	>= 5 - < 10
epoxypropoxy)methyl]butane	Eye Irrit.2; H319	

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3454-29-3 222-384-0	Skin Sens.1; H317 Aquatic Chronic3; H412	
reaction product: bisphenol-A-(epichlorhydrin) and epoxy resin (number average molecular weight <= 700) 25068-38-6 500-033-5 01-2119456619-26-XXXX	Eye Irrit.2; H319 Skin Irrit.2; H315 Skin Sens.1; H317 Aquatic Chronic2; H411	>= 3 - < 5
benzyl alcohol 100-51-6 202-859-9 01-2119492630-38-XXXX	Acute Tox.4; H302 Acute Tox.4; H332 Eye Irrit.2; H319	>= 3 - < 5
p-tert-butylphenyl 1-(2,3-epoxy)propyl ether 3101-60-8 221-453-2	Skin Irrit.2; H315 Eye Irrit.2; H319 Skin Sens.1; H317 Aquatic Chronic2; H411	>= 0,25 - < 1
Hydrocarbons, C9, aromatics 128601-23-0 918-668-5 265-199-0 01-2119455851-35-XXXX [corresponding group CAS 64742-95-6]	Flam. Liq.3; H226 STOT SE3; H335, H336 Asp. Tox.1; H304 Aquatic Chronic2; H411	>= 0,25 - < 1
Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)  919-446-0 265-185-4 01-2119458049-33-XXXX [corresponding group CAS 64742-82-1]	Flam. Liq.3; H226 STOT SE3; H336 STOT RE1; H372 Asp. Tox.1; H304 Aquatic Chronic2; H411	>= 0,25 - < 1

For the full text of the H-Statements mentioned in this Section, see Section 16.

# **SECTION 4: First aid measures**

# 4.1 Description of first aid measures

General advice : Move out of dangerous area.

Consult a physician.

Show this safety data sheet to the doctor in attendance.

If inhaled : Move to fresh air.

Consult a physician after significant exposure.

In case of skin contact : Take off contaminated clothing and shoes immediately.

Wash off with soap and plenty of water. If symptoms persist, call a physician.

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In case of eye contact : Immediately flush eye(s) with plenty of water.

Remove contact lenses.

Keep eye wide open while rinsing.

If eye irritation persists, consult a specialist.

If swallowed : Clean mouth with water and drink afterwards plenty of water.

Induce vomiting immediately and call a physician.

Do not give milk or alcoholic beverages.

Never give anything by mouth to an unconscious person.

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

**Symptoms** : Allergic reactions

**Excessive lachrymation** 

Erythema **Dermatitis** 

See Section 11 for more detailed information on health effects

and symptoms.

Risks : irritant effects

sensitising effects

Causes skin irritation.

May cause an allergic skin reaction. Causes serious eye irritation.

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

Treatment : Treat symptomatically.

# **SECTION 5: Firefighting measures**

#### 5.1 Extinguishing media

Suitable extinguishing media : Use extinguishing measures that are appropriate to local cir-

cumstances and the surrounding environment.

#### 5.2 Special hazards arising from the substance or mixture

ucts

Hazardous combustion prod- : No hazardous combustion products are known

### 5.3 Advice for firefighters

for firefighters

Special protective equipment : In the event of fire, wear self-contained breathing apparatus.

Further information : Standard procedure for chemical fires.

### **SECTION 6: Accidental release measures**

#### 6.1 Personal precautions, protective equipment and emergency procedures

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Personal precautions : Use personal protective equipment.

Deny access to unprotected persons.

6.2 Environmental precautions

Environmental precautions : Do not flush into surface water or sanitary sewer system.

If the product contaminates rivers and lakes or drains inform

respective authorities.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel,

acid binder, universal binder, sawdust).

Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For personal protection see section 8.

**SECTION 7: Handling and storage** 

7.1 Precautions for safe handling

Advice on safe handling : Do not breathe vapours or spray mist. Avoid exceeding the

given occupational exposure limits (see section 8). Do not get in eyes, on skin, or on clothing. For personal protection see section 8. Persons with a history of skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used. Smoking, eating and drinking should be prohibited in the application area. Follow standard hygiene

measures when handling chemical products

Advice on protection against

fire and explosion

: Normal measures for preventive fire protection.

Hygiene measures : Handle in accordance with good industrial hygiene and safety

practice. When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers

: Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store in accord-

ance with local regulations.

Other data : No decomposition if stored and applied as directed.

7.3 Specific end use(s)

according to Regulation (EC) No. 1907/2006

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Specific use(s) : No data available

#### **SECTION 8: Exposure controls/personal protection**

#### 8.1 Control parameters

Contains no substances with occupational exposure limit values.

#### 8.2 Exposure controls

#### Personal protective equipment

Eye protection : Safety glasses with side-shields

Eye wash bottle with pure water

Hand protection : Chemical-resistant, impervious gloves complying with an ap-

proved standard must be worn at all times when handling chemical products. Reference number EN 374. Follow manu-

facturer specifications.

Suitable for short time use or protection against splashes:

Butyl rubber/nitrile rubber gloves (0,4 mm), Contaminated gloves should be removed.

Suitable for permanent exposure:

Viton gloves (0.4 mm), breakthrough time >30 min.

Skin and body protection : Protective clothing (e.g. Safety shoes acc. to EN ISO 20345,

long-sleeved working clothing, long trousers). Rubber aprons and protective boots are additionally recommended for mixing

and stirring work.

Respiratory protection : No special measures required.

# **Environmental exposure controls**

General advice : Do not flush into surface water or sanitary sewer system.

If the product contaminates rivers and lakes or drains inform

respective authorities.

#### **SECTION 9: Physical and chemical properties**

### 9.1 Information on basic physical and chemical properties

Appearance : liquid
Colour : various

according to Regulation (EC) No. 1907/2006

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: characteristic Odour

Odour Threshold : No data available

: > 101 °C Flash point

Autoignition temperature : Remarks: Not applicable

Lower explosion limit (Vol-%) : No data available

Upper explosion limit (Vol-%) : No data available

Flammability : No data available

Oxidizing properties : No data available

рΗ Not applicable

Melting point/range / Freez-

ing point

Boiling point/boiling range

: No data available

: No data available

Vapour pressure : No data available

: ca.1,69 g/cm3 Density

at 20 °C

: insoluble Water solubility

Partition coefficient: n-

octanol/water Viscosity, dynamic : No data available

: No data available

Viscosity, kinematic > 20,5 mm2/s

at 40 °C

Relative vapour density : No data available

Evaporation rate : No data available

#### 9.2 Other information

No data available

### **SECTION 10: Stability and reactivity**

# 10.1 Reactivity

No dangerous reaction known under conditions of normal use.

#### 10.2 Chemical stability

according to Regulation (EC) No. 1907/2006

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The product is chemically stable.

#### 10.3 Possibility of hazardous reactions

Hazardous reactions : Stable under recommended storage conditions.

10.4 Conditions to avoid

Conditions to avoid : No data available

10.5 Incompatible materials

Materials to avoid : No data available

#### 10.6 Hazardous decomposition products

#### **SECTION 11: Toxicological information**

#### 11.1 Information on toxicological effects

#### **Acute toxicity**

Not classified based on available information.

#### Components:

reaction product: bisphenol-A-(epichlorhydrin) and epoxy resin (number average molecular

weight <= 700):

Acute oral toxicity : LD50 Oral (Rat): > 5.000 mg/kg

Acute dermal toxicity : LD50 Dermal (Rabbit): > 20.000 mg/kg

benzyl alcohol:

Acute oral toxicity : LD50 Oral (Rat): 1.620 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 4,178 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

p-tert-butylphenyl 1-(2,3-epoxy)propyl ether:

Acute oral toxicity : LD50 Oral (Rat): > 5.000 mg/kg

Acute inhalation toxicity : LC50 (Rat): 3.466 mg/l

Exposure time: 4 h

Acute dermal toxicity : LD50 Dermal (Rabbit): 6.000 mg/kg

Hydrocarbons, C9, aromatics:

Acute oral toxicity : LD50 Oral (Rat): > 2.000 mg/kg

Acute dermal toxicity : LD50 Dermal (Rabbit): > 2.000 mg/kg

Skin corrosion/irritation

Causes skin irritation.

**Product:** 

according to Regulation (EC) No. 1907/2006

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Remarks: Causes skin irritation.

#### Serious eye damage/eye irritation

Causes serious eye irritation.

#### **Product:**

Remarks: Causes serious eye irritation.

#### Respiratory or skin sensitisation

Skin sensitisation: May cause an allergic skin reaction.

Respiratory sensitisation: Not classified based on available information.

#### **Product:**

Remarks: May cause an allergic skin reaction.

#### Germ cell mutagenicity

Not classified based on available information.

#### **Product:**

Germ cell mutagenicity- As-

: No data available

sessment

#### Carcinogenicity

Not classified based on available information.

#### **Product:**

Carcinogenicity - Assess-

: No data available

ment

#### Reproductive toxicity

Not classified based on available information.

#### **Product:**

Reproductive toxicity - As-

: No data available

sessment

No data available

#### STOT - single exposure

Not classified based on available information.

#### STOT - repeated exposure

Not classified based on available information.

# **Aspiration toxicity**

Not classified based on available information.

according to Regulation (EC) No. 1907/2006

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# **SECTION 12: Ecological information**

#### 12.1 Toxicity

#### Components:

reaction product: bisphenol-A-(epichlorhydrin) and epoxy resin (number average molecular

weight <= 700) :

: LC50: 2 mg/l, 96 h, Oncorhynchus mykiss (rainbow trout) Toxicity to fish

aquatic invertebrates

Toxicity to daphnia and other : EC50: 1,8 mg/l, 48 h, Daphnia magna (Water flea)

benzyl alcohol:

Toxicity to fish : LC50: > 100 mg/l, 96 h, Fish

aquatic invertebrates

Toxicity to daphnia and other : EC50: > 100 mg/l, 48 h, Daphnia magna (Water flea)

Hydrocarbons, C9, aromatics:

Toxicity to algae : 2,6 - 2,9 mg/l, 72 h, Pseudokirchneriella subcapitata (green

algae)

#### 12.2 Persistence and degradability

No data available

#### 12.3 Bioaccumulative potential

No data available

### 12.4 Mobility in soil

No data available

#### 12.5 Results of PBT and vPvB assessment

#### **Product:**

Assessment : This substance/mixture contains no components considered

to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of

0.1% or higher...

### 12.6 Other adverse effects

#### **Product:**

Additional ecological infor-

mation

: An environmental hazard cannot be excluded in the event of

unprofessional handling or disposal.

Harmful to aquatic life with long lasting effects.

according to Regulation (EC) No. 1907/2006

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### **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

Product : The generation of waste should be avoided or minimized

wherever possible.

Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe

way.

Dispose of surplus and non-recyclable products via a licensed

waste disposal contractor.

Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional

local authority requirements.

Avoid dispersal of spilled material and runoff and contact with

soil, waterways, drains and sewers.

Contaminated packaging : 15 01 10\* packaging containing residues of or contaminated

by dangerous substances

#### **SECTION 14: Transport information**

**ADR** 

Not dangerous goods

**IATA** 

Not dangerous goods

**IMDG** 

Not dangerous goods

#### 14.6 Special precautions for user

No data available

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

Not applicable

# **SECTION 15: Regulatory information**

# 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

#### Prohibition/Restriction

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances,

preparations and articles (Annex XVII)

: Not applicable

REACH - Candidate List of Substances of Very High

Concern for Authorisation (Article 59).

: None of the components are listed

(=> 0.1 %).

according to Regulation (EC) No. 1907/2006

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REACH - List of substances subject to authorisation : Not applicable

(Annex XIV)

REACH Information: All substances contained in our Products are

- preregistered or registered by our upstream suppliers, and/or

preregistered or registered by us, and/or
excluded from the regulation, and/or
exempted from the registration.

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

Not applicable

VOC-CH (VOCV) : 2,55 %

no VOC duties

VOC-EU (solvent) : 6,11 %

If other regulatory information applies that is not already provided elsewhere in the Safety Data Sheet, then it is described in this subsection.

Health, safety and environmental regulation/legislation specific for the substance or mixture: : The Chemicals (Hazard Information and Packaging for Sup-

ply) Regulations 2002

Control of Substances Hazardous to Health Regulations 2002 The Management of Health and Safety at Work Regulations

1999

Health and Safety at Work Act 1974

Environmental Protection Act 1990 & Subsidiary Regulations

# 15.2 Chemical safety assessment

This product contains substances for which Chemical Safety Assessments are still required.

#### **SECTION 16: Other information**

#### **Full text of H-Statements**

H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H372	Causes damage to organs through prolonged or repeated exposure.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

**MARPOL** 

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#### Full text of other abbreviations

Acute Tox. Acute toxicity

**Aquatic Chronic** Chronic aquatic toxicity Asp. Tox. Aspiration hazard Eye Irrit. Eye irritation Flam. Liq. Flammable liquids Skin Irrit. Skin irritation Skin Sens. Skin sensitisation

Specific target organ toxicity - repeated exposure STOT RE Specific target organ toxicity - single exposure STOT SE

Accord européen relatif au transport international des marchandises **ADR** 

> Dangereuses par Route Chemical Abstracts Service

CAS **DNEL** Derived no-effect level EC50 Half maximal effective concentration

GHS Globally Harmonized System

IATA International Air Transport Association

**IMDG** International Maritime Code for Dangerous Goods

Median lethal dosis (the amount of a material, given all at once, which LD50

causes the death of 50% (one half) of a group of test animals)

LC50 Median lethal concentration (concentrations of the chemical in air that

kills 50% of the test animals during the observation period) International Convention for the Prevention of Pollution from Ships,

1973 as modified by the Protocol of 1978

Occupational Exposure Limit **OEL** 

**PBT** Persistent, bioaccumulative and toxic **PNEC** Predicted no effect concentration

Regulation (EC) No 1907/2006 of the European Parliament and of the **REACH** 

> Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a

**European Chemicals Agency** 

Substances of Very High Concern **SVHC** 

Very persistent and very bioaccumulative vPvB

The information contained in this Safety Data Sheet corresponds to our level of knowledge at the time of publication. All warranties are excluded. Our most current General Sales Conditions shall apply. Please consult the product data sheet prior to any use and processing.

Changes as compared to previous version!