

## SAFETY DATA SHEET

### RASCOflex US509F A-Comp

According to Regulation (EC) No 1907/2006, Annex II

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

##### 1.1. Product identifier

Product name RASCOflex US509F A-Comp

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

Identified uses Semi-flexible silicate polyurethane Injection Resin

##### 1.3. Details of the supplier of the safety data sheet

Supplier **Rascor Construction Chemicals GmbH**, Ratsgasse 6, 97688 Bad Kissingen, Germany  
Phone: +49 (0) 971 130 2738, Fax: +49 (0) 971 133 6251

**Rascor International AG**, Gewerbestrasse 4, 8162 Steinmaur, Switzerland  
Phone: +41 (0) 44-857 11 11, Fax: +41 (0) 44-857 11 00

##### 1.4. Emergency telephone number

Emergency telephone Phone: +41 (0) 44-857 11 11 (8.00h - 17.00h)

#### SECTION 2: Hazards identification

##### 2.1. Classification of the substance or mixture

###### Classification

Physical hazards Not Classified

Health hazards Skin Irrit. 2 - H315 Eye Irrit. 2 - H319

Environmental hazards Not Classified

##### 2.2. Label elements

###### Pictogram



Signal word Warning

Hazard statements H315 Causes skin irritation.  
H319 Causes serious eye irritation.

Precautionary statements P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P302+P352 IF ON SKIN: Wash with plenty of water.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P332+P313 If skin irritation occurs: Get medical advice/attention.  
P337+P313 If eye irritation persists: Get medical advice/attention.

Supplementary precautionary statements P264 Wash contaminated skin thoroughly after handling.  
P321 Specific treatment (see medical advice on this label).  
P362+P364 Take off contaminated clothing and wash it before reuse.

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### 2.3. Other hazards

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

#### 3.2. Mixtures

<b>SODIUM SILICATE</b>			<b>30-60%</b>
CAS number: 1344-09-8	EC number: 215-687-4	REACH registration number: 01-2119448725-31-0001	
<b>Classification</b>			
Skin Irrit. 2 - H315			
Eye Irrit. 2 - H319			

The full text for all hazard statements is displayed in Section 16.

#### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

<b>General information</b>	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention. Treat symptomatically.
<b>Inhalation</b>	IF INHALED: Get medical attention immediately. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Do not induce vomiting.
<b>Ingestion</b>	IF SWALLOWED: Get medical attention immediately. If throat irritation or coughing persists, proceed as follows. Rinse mouth thoroughly with water. Promptly get affected person to drink large volumes of water to dilute the swallowed chemical. Stop if the affected person feels sick as vomiting may be dangerous. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs.
<b>Skin contact</b>	IF ON SKIN (or hair): Rinse immediately with plenty of water. Continue to rinse for at least 10 minutes. Get medical attention if irritation persists after washing. Remove contaminated clothing.
<b>Eye contact</b>	IF IN EYES: Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes and get medical attention. Get medical attention if irritation persists after washing.
<b>Protection of first aiders</b>	First aid personnel should wear appropriate protective equipment during any rescue.

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

<b>General information</b>	Treat symptomatically. See Section 11 for additional information on health hazards.
<b>Inhalation</b>	May cause irritation.
<b>Ingestion</b>	May cause stomach pain or vomiting. May cause irritation. Gastrointestinal symptoms, including upset stomach.
<b>Skin contact</b>	May cause skin irritation.
<b>Eye contact</b>	Causes skin and eye irritation.

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

<b>Notes for the doctor</b>	Treat symptomatically.
<b>Specific treatments</b>	Treat symptomatically.

#### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

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**Suitable extinguishing media** Use fire-extinguishing media suitable for the surrounding fire. Extinguish with alcohol-resistant foam, carbon dioxide or dry powder.

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

**Specific hazards** Irritating gases or vapours.

**Hazardous combustion products** Harmful gases or vapours.

### 5.3. Advice for firefighters

**Protective actions during firefighting** No action shall be taken without appropriate training or involving any personal risk. Stop leak if safe to do so. If leakage cannot be stopped, evacuate area. Move containers from fire area if it can be done without risk.

**Special protective equipment for firefighters** Use air-supplied respirator, gloves and protective goggles.

## SECTION 6: Accidental release measures

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

**Personal precautions** No action shall be taken without appropriate training or involving any personal risk. Keep unnecessary and unprotected personnel away from the spillage. Avoid contact with skin, eyes and clothing. Avoid inhalation of vapours. Follow precautions for safe handling described in this safety data sheet.

### 6.2. Environmental precautions

**Environmental precautions** Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

### 6.3. Methods and material for containment and cleaning up

**Methods for cleaning up** If leakage cannot be stopped, evacuate area. Move containers from spillage area. Large Spillages: Absorb spillage with sand or other inert absorbent. Collect and place in suitable waste disposal containers and seal securely. Small Spillages: Absorb small quantities with paper towels and evaporate in a safe place. Residues and empty containers should be taken care of as hazardous waste according to local and national provisions. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

### 6.4. Reference to other sections

**Reference to other sections** For personal protection, see Section 8. For waste disposal, see Section 13. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

**Usage precautions** For professional users only. Do not handle until all safety precautions have been read and understood. Use only in well-ventilated areas. Keep container dry. Container must be kept tightly closed when not in use. Do not eat, drink or smoke when using this product.

**Advice on general occupational hygiene** Do not eat, drink or smoke when using this product. Provide eyewash station. Wash promptly with soap and water if skin becomes contaminated. Promptly remove any clothing that becomes contaminated.

### 7.2. Conditions for safe storage, including any incompatibilities

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**Storage precautions** Store at temperatures between 4°C and 30°C. Store in tightly-closed, original container in a dry, cool and well-ventilated place. Do not store near heat sources or expose to high temperatures. Store away from the following materials: Acids. Alkalis.

**Storage class** Chemical storage.

### 7.3. Specific end use(s)

**Specific end use(s)** The identified uses for this product are detailed in Section 1.2.

## SECTION 8: Exposure Controls/personal protection

### 8.1. Control parameters

#### Occupational exposure limits

#### SODIUM SILICATE

The existing OEL (TRGS 900, June 2008) for dust is 3 mg/m<sup>3</sup> (alveolar fraction) and 10 mg/m<sup>3</sup> (respirable fraction).

There are different sodium silicates dangerousness depending on their MR values (molar ratio) and concentration. DNELs and PNECs values found in the table below correspond to the worst case evaluated (MR<1.6, and high concentration).

#### SODIUM SILICATE (CAS: 1344-09-8)

<b>DNEL</b>	Workers - Inhalation; Long term systemic effects: 5.61 mg/kg/day General population - Inhalation; Long term systemic effects: 1.38 mg/kg/day Workers - Dermal; Long term systemic effects: 1.59 mg/kg/day General population - Oral; Long term local effects: not determined
<b>PNEC</b>	Industry/Professional - Fresh water; 7.5 mg/l Industry/Professional - Marine water; 1 mg/l Industry/Professional - STP; 348 mg/l

### 8.2. Exposure controls

#### Protective equipment



#### Appropriate engineering controls

This product is not to be used under conditions of poor ventilation.

#### Eye/face protection

Personal protective equipment for eye and face protection should comply with European Standard EN166. Tight-fitting safety glasses.

#### Hand protection

To protect hands from chemicals, gloves should comply with European Standard EN374. It is recommended that gloves are made of the following material: Nitrile rubber.

#### Other skin and body protection

Wear appropriate clothing to prevent skin contamination.

#### Hygiene measures

Wash hands thoroughly after handling. Promptly remove any clothing that becomes contaminated. Do not eat, drink or smoke when using this product.

#### Respiratory protection

Combination filter, type A2/P3.

#### Environmental exposure controls

Keep container tightly sealed when not in use. Residues and empty containers should be taken care of as hazardous waste according to local and national provisions.

## SECTION 9: Physical and Chemical Properties

### 9.1. Information on basic physical and chemical properties

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<b>Appearance</b>	Clear liquid.
<b>Colour</b>	Colourless.
<b>Odour</b>	Characteristic.
<b>Odour threshold</b>	Not determined.
<b>pH</b>	Not available.
<b>Melting point</b>	Not applicable.
<b>Initial boiling point and range</b>	Not determined.
<b>Flash point</b>	>200°C
<b>Evaporation rate</b>	Not determined.
<b>Evaporation factor</b>	Not determined.
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Upper/lower flammability or explosive limits</b>	Not applicable.
<b>Other flammability</b>	Not applicable.
<b>Vapour pressure</b>	Not determined.
<b>Vapour density</b>	Not determined.
<b>Relative density</b>	Not applicable.
<b>Bulk density</b>	Not applicable.
<b>Solubility(ies)</b>	Not determined.
<b>Partition coefficient</b>	Not determined.
<b>Auto-ignition temperature</b>	Not determined.
<b>Decomposition Temperature</b>	Not determined.
<b>Viscosity</b>	200 - 300 mPa s @ 25°C
<b>Explosive properties</b>	Not applicable.
<b>Explosive under the influence of a flame</b>	Not considered to be explosive.
<b>Oxidising properties</b>	Not applicable.
<b>Density</b>	1.139 kg/l @ 23°C

### 9.2. Other information

#### SECTION 10: Stability and reactivity

##### 10.1. Reactivity

##### 10.2. Chemical stability

**Stability** Stable at normal ambient temperatures and when used as recommended.

##### 10.3. Possibility of hazardous reactions

**Possibility of hazardous reactions** The following materials may react with the product: Acids or Isocyanate reactions

##### 10.4. Conditions to avoid

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**Conditions to avoid** Avoid exposure to high temperatures or direct sunlight.

### 10.5. Incompatible materials

**Materials to avoid** Alcohols. Isocyanates. Strong acids.

### 10.6. Hazardous decomposition products

**Hazardous decomposition products** Carbon dioxide (CO<sub>2</sub>). Carbon monoxide (CO). Nitrous gases (NO<sub>x</sub>).

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

**Toxicological effects** This information has been determined by consideration of the toxicological data for the components and for analogous products.

#### Acute toxicity - oral

**Notes (oral LD<sub>50</sub>)** Method(s) - Metodo OCDE 401 Condiciones - rat male/female  
Results/Conclusions - LD50 = 3400 mg/Kg bw.

#### Acute toxicity - dermal

**Notes (dermal LD<sub>50</sub>)** Methods(s) - EPA OPPTS 870.1200 Condiciones - rat (Sprague-Dawley) male/female  
Material: CAS 1312-76-1 Results/Conclusions - LD50 > 5000 mg/kg bw.

#### Acute toxicity - inhalation

**Notes (inhalation LC<sub>50</sub>)** Method(s) - EPA OPPTS 870.1300 Condiciones - rat (Sprague-Dawley) male/female Material:  
CAS 1312-76-1  
Results/Conclusions - LC50 (4hr) > 2.06 mg/L air.

#### Skin corrosion/irritation

**Animal data** Primary dermal irritation index: 0.4

#### Serious eye damage/irritation

**Serious eye damage/irritation** Slightly irritating.

#### Respiratory sensitisation

**Respiratory sensitisation** Based on available data the classification criteria are not met.

#### Skin sensitisation

**Skin sensitisation** Based on available data the classification criteria are not met.

#### Germ cell mutagenicity

**Genotoxicity - in vitro** Conclusive data but not sufficient for classification.

**Genotoxicity - in vivo** Conclusive data but not sufficient for classification.

#### Carcinogenicity

**Carcinogenicity** Based on available data the classification criteria are not met. Conclusive data but not sufficient for classification.

#### Reproductive toxicity

**Reproductive toxicity - fertility** Based on available data the classification criteria are not met.

**Reproductive toxicity - development** This substance has no evidence of toxicity to reproduction.

#### Specific target organ toxicity - single exposure

**STOT - single exposure** Not determined.

#### Specific target organ toxicity - repeated exposure

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**STOT - repeated exposure** NOAEL =159 mg/kg bw/day, Oral, (rat Sprague-Dawley male/female). NOAEL =2400 mg/kg bw/day, Oral, (rat Charles River Cesarean-derived male/female).

### Aspiration hazard

**Aspiration hazard** Not anticipated to present an aspiration hazard, based on chemical structure.

## SECTION 12: Ecological Information

**Ecotoxicity** Ecotoxicological data have not been determined specifically for this product. Information given is based on a knowledge of the components and the ecotoxicology of similar products.

### 12.1. Toxicity

**Toxicity** No data is available on the product itself.

**Acute toxicity - fish** NOEC, 96 hours: 1108 mg/l, Brachydanio rerio (Zebra Fish)  
NOEC, (96 hours: Mortality)=348 mg/l, Brachydanio rerio (Zebra Fish)

**Acute toxicity - aquatic invertebrates** (OECD Guideline 202, part 1), 48 hours: 1700 mg/l, Daphnia magna

**Acute toxicity - aquatic plants** DIN 38412, Teil 9 according to OECD 201  
, 72 hours: 207 mg/l, Scenedesmus subspicatus  
, 72 hours: >345.4 mg/l, Scenedesmus subspicatus

**Acute toxicity - microorganisms** Scientifically unjustified.

### 12.2. Persistence and degradability

**Persistence and degradability** The product is degraded completely by abiotic reduction.

**Phototransformation** Scientifically unjustified.

**Biodegradation** Scientifically unjustified.

### 12.3. Bioaccumulative potential

**Bioaccumulative potential** Bioaccumulation is unlikely.

**Partition coefficient** Not determined.

### 12.4. Mobility in soil

**Mobility** The product is soluble in water. The product is non-volatile.

### 12.5. Results of PBT and vPvB assessment

**Results of PBT and vPvB assessment** This product does not contain any substances classified as PBT or vPvB.

### 12.6. Other adverse effects

**Other adverse effects** None known.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

**General information** Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Waste should be treated as controlled waste.

**Disposal methods** Dispose of contents/container in accordance with national regulations. Waste should be treated as controlled waste.

## SECTION 14: Transport information

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**General** The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADR/RID).

### 14.1. UN number

Not applicable.

### 14.2. UN proper shipping name

Not applicable.

### 14.3. Transport hazard class(es)

No transport warning sign required.

### 14.4. Packing group

Not applicable.

### 14.5. Environmental hazards

**Environmentally hazardous substance/marine pollutant**

No.

### 14.6. Special precautions for user

Not applicable.

### 14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

**Transport in bulk according to** Not applicable.

**Annex II of MARPOL 73/78  
and the IBC Code**

## SECTION 15: Regulatory information

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

#### **National regulations**

Control of Substances Hazardous to Health Regulations 2002 (as amended).  
EH40/2005 Workplace exposure limits.  
Health and Safety at Work etc. Act 1974 (as amended).  
The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).

#### **EU legislation**

Commission Decision 2000/532/EC as amended by Decision 2001/118/EC establishing a list of wastes and hazardous waste pursuant to Council Directive 75/442/EEC on waste and Directive 91/689/EEC on hazardous waste with amendments.  
Commission Directive 2000/39/EC of 8 June 2000 establishing a first list of indicative occupational exposure limit values in implementation of Council Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work (as amended).  
Commission Regulation (EU) No 453/2010 of 20 May 2010.  
Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).  
Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (as amended).

Verwaltungsvorschrift wassergefährdende Stoffe (Germany): WGK 1 (slightly water pollutant)

#### **Guidance**

Workplace Exposure Limits EH40.

#### **Restrictions (Title VIII Regulation 1907/2006)**

No specific restrictions on use are known for this product.



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### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

### Inventories

#### **EU - EINECS/ELINCS**

All the ingredients are listed or exempt.

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

<b>General information</b>	Only trained personnel should use this material.
<b>Revision date</b>	02/09/2015
<b>Revision</b>	1
<b>SDS number</b>	5130
<b>Hazard statements in full</b>	H315 Causes skin irritation. H319 Causes serious eye irritation.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.