SAFETY DATA SHEET

RASCOflex US409 A-Comp

According to WHMIS 2015

4 Identification	
1. Identification	
Product identifier	
Product name	RASCOflex US409 A-Comp
Recommended use of the cher	mical and restrictions on use
Application	Semi-flexible silicate polyurethane Injection Resin
Details of the supplier of the sa	ifety 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
Emergency telephone number	
Emergency telephone	Phone: +41 (0) 44-857 11 11 (8.00h - 17.00h)
2. Hazard(s) identification	

Classification of the substance or mixture

Physical hazards	Not Classified
Health hazards	Skin Irrit. 2 - H315 Eye Irrit. 2A - H319
Environmental hazards	Not Classified
Label elements	

Pictogram



Signal word	Warning
Hazard statements	H315 Causes skin irritation. H319 Causes serious eye irritation.

Precautionary statements	 P264 Wash contaminated skin thoroughly after handling. 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. P321 Specific treatment (see medical advice on this label). P332+P313 If skin irritation occurs: Get medical advice/attention. P337+P313 If eye irritation persists: Get medical advice/attention.
	P362+P364 Take off contaminated clothing and wash it before reuse.

3. Composition/information on ingredients

Mixtures			
Silicic acid, sodium salt	EC number: 215-687-4	REACH registration number:	35 - 35 %
CA3 humber. 1344-05-0		01-2119448725-31-0001	
Classification			
Skin Irrit. 2 - H315			
Eye Irrit. 2A - H319			

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

4. First-aid measures

Description of first aid measures

General information	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention. Treat symptomatically.
Inhalation	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.
Ingestion	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.
Skin Contact	IF ON SKIN: 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.
Eye contact	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.
Protection of first aiders	First aid personnel should wear appropriate protective equipment during any rescue.
Most important symptoms and	d effects, both acute and delayed
General information	Treat symptomatically. See Section 11 for additional information on health hazards.
Inhalation	Irritating.
Ingestion	May cause stomach pain or vomiting. May cause irritation. Gastrointestinal symptoms, including upset stomach.
Skin contact	May cause skin irritation.
Eye contact	Causes skin and eye irritation.

Indication of immediate medic	al attention and special treatment needed
Notes for the doctor	Treat symptomatically.
Specific treatments	Treat symptomatically.
5.Fire-fighting measures	
Extinguishing media	
Suitable extinguishing media	Use fire-extinguishing media suitable for the surrounding fire. Extinguish with alcohol-resistant foam, carbon dioxide or dry powder.
Special hazards arising from the	he substance or mixture
Specific hazards	The product is not flammable. Irritating gases or vapors.
Hazardous combustion products	Harmful gases or vapors.
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.
6. Accidental release measure	19
Personal precautions, protecti	ve 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 vapors. Follow precautions for safe handling described in this safety data sheet.
Environmental precautions	
Environmental precautions	Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.
Methods and material for cont	ainment 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.
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.
7. Handling and storage	
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 tighthe closed when not in use. Do not est, dripk or amake when using this product.

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.
Conditions for safe storage,	including any incompatibilities
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.
Specific end uses(s)	
Specific end use(s)	The identified uses for this product are detailed in Section 1.2.
8. Exposure Controls/person	nal protection
	SODIUM SILICATE (CAS: 1344-09-8)
DNEL	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
PNEC	Industry/Professional - Fresh water; 7.5 mg/l Industry/Professional - Marine water; 1 mg/l Industry/Professional - STP; 348 mg/l
Exposure controls	
Protective equipment	
Appropriate engineering controls	This product is not to be used under conditions of poor ventilation. In case of insufficient ventilation, wear suitable respiratory equipment.
Eye/face protection	Personal protective equipment for eye and face protection should comply with OSHA 1910.133.
Hand protection	To protect hands from chemicals, gloves should comply with OSHA 1910.138 and be demonstrated to be impervious to the chemical and resist degradation. Nitrile rubber. Butyl 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.
9. Physical and Chemical Pr	roperties

Information on basic physical and chemical properties

Appearance	Clear liquid.
Color	Colorless.

Odor	Characteristic.
Odor threshold	Not determined.
рН	11,5 - 13
Melting point	Not applicable.
Initial boiling point and range	Not determined.
Flash point	Not determined.
Evaporation rate	Not determined.
Evaporation factor	Not determined.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	Not applicable.
Other flammability	Not applicable.
Vapour pressure	Not determined.
Vapour density	Not determined.
Relative density	Not applicable.
Bulk density	Not applicable.
Solubility(ies)	Not determined.
Partition coefficient	Not determined.
Auto-ignition temperature	Not determined.
Decomposition Temperature	Not determined.
Viscosity	120 - 300 mPa s @ 25°C
Explosive properties	Not applicable.
Explosive under the influence of a flame	Not considered to be explosive.
Oxidising properties	Not applicable.
Density	1.431 kg/lt @ 23°C
10. Stability and reactivity	
Reactivity	Polymerises exothermically with diisocyanates at ambient temperatures. The reaction becomes progressively more vigorous and can be violent at higher temperatures if the miscibility of reaction partners is good or is supported by stirring or by the presence of solvents.
Stability	Stable at normal ambient temperatures and when used as recommended.
Possibility of hazardous reactions	The following materials may react with the product: Acids. Isocyanates.
Conditions to avoid	Avoid exposure to high temperatures or direct sunlight.
Materials to avoid	Alcohols. Isocyanates. Strong acids.

Hazardous decomposition products	Carbon dioxide (CO2). Carbon monoxide (CO). Nitrous gases (NOx).
11. Toxicological information	
Information on toxicological ef	fects
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 LD₅o)	Method(s) - Metodo OCDE 401 Condiciones - rat male/female Results/Conclusions - LD50 > 3400 mg/kg bw.
Acute toxicity - dermal Notes (dermal LD ₅₀)	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 LC₅₀)	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 sensitization Respiratory sensitisation	Based on available data the classification criteria are not met.
Skin sensitization 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 - STOT - repeated exposure	<u>repeated exposure</u> 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.

12. Ecological Information

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.
Toxicity	
Toxicity	No information available.
Acute toxicity - fish	LC₅₀, 96 hours: 3185 mg/l, Brachydanio rerio (Zebra Fish) EC₅₀, (96 hours: Mortality) = 348 mg/l, Brachydanio rerio (Zebra Fish)
Acute toxicity - aquatic invertebrates	EC₅₀ 48 hours: 4857 mg/l, Daphnia magna EC₅₀ 48 hours: > 1000 mg/l, bacteria (pseudomonas putida)
Acute toxicity - microorganisms	Scientifically unjustified.
Persistence and degradability	
Persistence and degradability	The product is degraded completely by abiotic reduction.
Phototransformation	Scientifically unjustified.
Biodegradation	Scientifically unjustified.
Bioaccumulative potential	
Bio-Accumulative Potential	Bioaccumulation is unlikely.
Partition coefficient	Not determined.
Mobility in soil	
Mobility	The product is soluble in water. The product is non-volatile.
Results of PBT and vPvB asse	essment
Results of PBT and vPvB assessment	This product does not contain any substances classified as PBT or vPvB.
Other adverse effects Other adverse effects	None known.
13. Disposal considerations	
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.

14. Transport information

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

UN Number

Not applicable.

UN proper shipping name

Not applicable.

Transport hazard class(es)

No transport warning sign required.

Packing group

Not applicable.

Environmental hazards

No environmentally hazardous substance

Special precautions for user

No data available.

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

Not applicable.

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.

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

Inventories

EU - EINECS/ELINCS

All the ingredients are listed or exempt.

16. Other information	
General information	Only trained personnel should use this material.
Revision date	1/11/2016
Revision	1
SDS No.	5300
Hazard statements in full	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.