SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of:
Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008
This SDS is for generic information purposes and does not reflect required country specific information for OEL

ZWALUW AQUA-SILICONE CLEAR
Supercedes Date: 25-May-2022

Revision date 25-May-2022
Revision Number 1

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

1.1. Product identifier

Product Name ZWALUW AQUA-SILICONE CLEAR

Pure substance/mixture Mixture

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

Recommended use Sealant

Uses advised against None known.

1.3. Details of the supplier of the safety data sheet

Company Name
Bostik Benelux B.V.
Denariusstraat 11
4903 RC Oosterhout
The Netherlands
Tel: + 31 162 491 000

E-mail address SDS.box-EU@bostik.com

1.4. Emergency telephone number

Emergency Telephone 112

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

Chronic aquatic toxicity	Category 3 - (H412)

2.2. Label elements

Hazard statements
H412 - Harmful to aquatic life with long lasting effects

Precautionary Statements - EU (§28, 1272/2008)
P273 - Avoid release to the environment
P501 - Dispose of contents/ container to an approved waste disposal plant

2.3. Other hazards

Small amounts of acetic acid (CAS 64-19-7) are formed by hydrolysis and released upon curing.

PBT & vPvB

This mixture contains substances considered to be persistent, bio-accumulating and toxic (PBT). This mixture contains substances considered to be very persistent and very bioaccumulating (vPvB).

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Chemical name	EC No.	CAS No.	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)	REACH registration number
Silica, amorphous 5 - <10 %	231-545-4	7631-86-9	[B]	-	-	-	01-2119379499-16-XXXX
Triacetoxy(propyl)silane 1 - <5 %	241-816-9	17865-07-5	Skin Corr. 1B (H314) (EUH071)	-	-	-	01-2119966899-07-XXXX
Silanetriol, methyl-, triacetate 1 - <2.5 %	224-221-9	4253-34-3	Skin Corr. 1C (H314) Acute Tox. 4 (H302) (EUH014)	-	-	-	01-2119962266-32-XXXX
Octamethylcyclotetrasiloxane [D4] 0.01 - <0.1 %	209-136-7	556-67-2	Repr. 2 (H361f) Aquatic Chronic 1 (H410) Flam. Liq. 3 (H226) [G]	-	-	10	01-2119529238-36-XXXX

Air contaminants formed when using the substance or mixture as intended

Chemical name	EC No	CAS No	Classification according to Regulation (EC) No. 1272/2008 [CLP]	Specific concentration limit (SCL)	M-Factor	M-Factor (long-term)	REACH registration number
Acetic acid 64-19-7	200-580-7	64-19-7	Skin Corr. 1A (H314) Flam. Liq. 3 (H226)	Eye Irrit. 2 :: 10%<=C<25% Skin Corr. 1A :: C>=90% Skin Corr. 1B :: 25%<=C<90% Skin Irrit. 2 :: 10%<=C<25%	-	-	01-2119475328-30-XXXX

Full text of H- and EUH-phrases: see section 16

Classification according to Regulation (EC) No. 1272/2008 [CLP] - Notes
[B] - Substance with a Community workplace exposure limit

Acute Toxicity Estimate
If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based on its components

Chemical name	EC No	CAS No	Oral LD50 mg/kg	Dermal LD50 mg/kg	Inhalation LC50 - 4 hour - dust/mist - mg/L	Inhalation LC50 - 4 hour - vapour - mg/L	Inhalation LC50 - 4 hour - gas - ppm
Silica, amorphous	231-545-4	7631-86-9	-	-	-	-	-

Chemical name	EC No	CAS No	Oral LD50 mg/kg	Dermal LD50 mg/kg	Inhalation LC50 - 4 hour - dust/mist - mg/L	Inhalation LC50 - 4 hour - vapour - mg/L	Inhalation LC50 - 4 hour - gas - ppm
Triacetoxy(propyl)silane	241-816-9	17865-07-5	-	-	-	-	-
Silanetriol, methyl-, triacetate	224-221-9	4253-34-3	1600	-	-	-	-
Octamethylcyclotetrasiloxane [D4]	209-136-7	556-67-2	-	-	-	-	-

This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance. If medical advice is needed, have product container or label at hand.

Inhalation Remove to fresh air. If symptoms persist, call a doctor.

Eye contact Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Consult an ophthalmologist.

Skin contact In the case of skin irritation or allergic reactions see a doctor. Wash skin with soap and water.

Ingestion Never give anything by mouth to an unconscious person. Rinse mouth thoroughly with water. Drink 1 or 2 glasses of water. Do NOT induce vomiting.

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

Symptoms None known.

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

Note to doctors Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable Extinguishing Media Water spray, carbon dioxide (CO2), dry chemical, alcohol-resistant foam.

Unsuitable extinguishing media Full water jet.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the chemical Thermal decomposition can lead to release of irritating gases and vapours.

Hazardous combustion products Carbon oxides. Carbon dioxide (CO2). Silicon dioxide. Thermal decomposition can lead to release of irritating and toxic gases and vapours.

5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters	Wear self contained breathing apparatus for fire fighting if necessary.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Do not get in eyes, on skin, or on clothing. Use personal protective equipment as required. Ensure adequate ventilation.
For emergency responders	Use personal protection recommended in Section 8.

6.2. Environmental precautions

Environmental precautions	Prevent product from entering drains. Do not allow to enter into soil/subsoil. See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

Methods for containment	Do not scatter spilled material with high pressure water streams.
Methods for cleaning up	Take up mechanically, placing in appropriate containers for disposal.
Prevention of secondary hazards	Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Reference to other sections	See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling	Ensure adequate ventilation.
General hygiene considerations	Do not eat, drink or smoke when using this product. Wash hands before breaks and after work. Take off all contaminated clothing and wash it before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions	Protect from moisture. Keep away from food, drink and animal feedingstuffs.
Recommended storage temperature	Keep at temperatures between 10 and 35 °C.

7.3. Specific end use(s)

Specific use(s)
Sealant.

Risk Management Methods (RMM)	The information required is contained in this Safety Data Sheet.
Other information	Observe technical data sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits	Small amounts of acetic acid (CAS 64-19-7) are formed by hydrolysis and released upon curing

Only European Community Occupational Exposure Limits will be shown in this document. Please refer to regional SDS for further information.

Chemical name	European Union
Silica, amorphous 7631-86-9	TWA: 0.1 mg/m³
Acetic acid 64-19-7	TWA: 25 mg/m³ TWA: 10 ppm STEL: 50 mg/m³ STEL: 20 ppm

Derived No Effect Level (DNEL) No information available

Derived No Effect Level (DNEL)			
Octamethylcyclotetrasiloxane [D4] (556-67-2)			
Type	Exposure route	Derived No Effect Level (DNEL)	Safety factor
worker Long term Systemic health effects	Inhalation	73 mg/m³	

Derived No Effect Level (DNEL)			
Octamethylcyclotetrasiloxane [D4] (556-67-2)			
Type	Exposure route	Derived No Effect Level (DNEL)	Safety factor
Consumer Long term Systemic health effects	Inhalation	13 mg/m³	
Consumer Long term Systemic health effects	Oral	3.7 mg/kg bw/d	

Predicted No Effect Concentration (PNEC) No information available.

Predicted No Effect Concentration (PNEC)	
Octamethylcyclotetrasiloxane [D4] (556-67-2)	
Environmental compartment	Predicted No Effect Concentration (PNEC)
Freshwater	0.0015 mg/l
Marine water	0.00015 mg/l
Freshwater sediment	3 mg/kg
Marine sediment	0.3 mg/kg
Soil	0.54 mg/kg
Sewage treatment plant	10 mg/l

8.2. Exposure controls

Engineering controls Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Eye/face protection Wear safety glasses with side shields (or goggles). Eye protection must conform to standard EN 166.

Hand protection Wear suitable gloves. Recommended Use:. Neoprene™. Nitrile rubber. Butyl rubber. Glove thickness > 0.7mm. The breakthrough time for the mentioned glove material is in general greater than 480 min. Ensure that the breakthrough time of the glove material is not exceeded. Refer to glove supplier for information on breakthrough time for specific gloves. Gloves must conform to standard EN 374

Skin and body protection None under normal use conditions.

Respiratory protection In case of inadequate ventilation wear respiratory protection. Wear a respirator conforming to EN 140 with Type A/P2 filter or better. Ensure adequate ventilation,

	especially in confined areas.
Recommended filter type:	Organic gases and vapours filter conforming to EN 14387. White. Brown.

Environmental exposure controls Do not allow uncontrolled discharge of product into the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	Solid
Appearance	Paste
Colour	See section 1 for more information
Odour	Acetic acid.
Odour threshold	No information available

Property	**Values**	**Remarks • Method**
Melting point / freezing point	No data available	None known
Initial boiling point and boiling range	No data available	None known
Flammability	No data available	None known
Flammability Limit in Air		None known
Upper flammability or explosive limits	No data available	
Lower flammability or explosive limits	No data available	
Flash point	> 100 °C	
Autoignition temperature	No data available	None known
Decomposition temperature		None known
pH	.	Not applicable Insoluble in water
pH (as aqueous solution)	No data available	None known
Kinematic viscosity	> 21 mm²/s	
Dynamic viscosity	No data available	
Water solubility	No data available Immiscible in water	
Solubility(ies)	No data available	None known
Partition coefficient	No data available	None known
Vapour pressure	No data available	None known
Relative density	No data available	None known
Bulk Density	No data available	
Liquid Density	1.03	
Relative vapour density	No data available	None known
Particle characteristics		
Particle Size	No information available	
Particle Size Distribution	No information available	

9.2. Other information

VOC Content (%)

9.2.1. Information with regards to physical hazard classes

Not applicable

9.2.2. Other safety characteristics

No information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity Product cures with moisture.

10.2. Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to mechanical impact None.
Sensitivity to static discharge None.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

Conditions to avoid Product cures with moisture. Protect from moisture. Exposure to air or moisture over prolonged periods. Do not freeze. Keep away from open flames, hot surfaces and sources of ignition.

10.5. Incompatible materials

Incompatible materials Strong oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition products None under normal use conditions. Stable under recommended storage conditions.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Information on likely routes of exposure

Product Information

Inhalation Based on available data, the classification criteria are not met.

Eye contact Based on available data, the classification criteria are not met.

Skin contact Based on available data, the classification criteria are not met.

Ingestion Based on available data, the classification criteria are not met.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms No information available.

Acute toxicity

Numerical measures of toxicity

The following values are calculated based on chapter 3.1 of the GHS document

Component Information

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Silica, amorphous	=7900 mg/kg (Rattus)	> 5000 mg/kg (Oryctolagus cuniculus)	>2.2 mg/L (Rattus) 1 h
Silanetriol, methyl-, triacetate	LD50 = 1600 mg/kg (Rattus) OECD 401	-	-

Octamethylcyclotetrasiloxane [D4]	LD50 > 4800 mg/kg (Rattus) OECD 401	LD50 > 2400 mg/kg (Rattus) OECD 402	=36 g/m³ (Rattus) 4 h

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation The assessment of the result of testing was done in accordance with the guideline of the Commission 92/ 69/ EEC.

Method	Species	Exposure route	Effective dose	Exposure time	Results
	Rabbit	Dermal		6 days	Product score <=1 Non-irritant

Serious eye damage/eye irritation By analogy to another tested similar product: No irritation after contact to the eyes. (H319 is void). The assessment of the result of testing was done in accordance with the guideline of the Commission 92/ 69/ EEC.

Method	Species	Exposure route	Effective dose	Exposure time	Results
	Rabbit	eye		6 days	Product score <=1 Non-irritant

Respiratory or skin sensitisation Based on available data, the classification criteria are not met.

Germ cell mutagenicity Based on available data, the classification criteria are not met.

Carcinogenicity Based on available data, the classification criteria are not met.

Reproductive toxicity Based on available data, the classification criteria are not met.

Chemical name	European Union
Octamethylcyclotetrasiloxane [D4]	Repr. 2

STOT - single exposure Based on available data, the classification criteria are not met.

STOT - repeated exposure Based on available data, the classification criteria are not met.

Aspiration hazard Based on available data, the classification criteria are not met.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Endocrine disrupting properties No information available.

11.2.2. Other information

Other adverse effects No information available.

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity Harmful to aquatic life with long lasting effects.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea	M-Factor	M-Factor (long-term)
Silica, amorphous 7631-86-9	EC50: =440mg/L (72h, Pseudokirchneriella subcapitata)	LC50: =5000mg/L (96h, Brachydanio rerio)	-	EC50: =7600mg/L (48h, Ceriodaphnia dubia)		
Triacetoxy(propyl)silane 17865-07-5	EC50 (72h): approx. 24 mg/l(Pseudokirchenriella subpicata)	LC50 (96h) = 108.89 mg/L	-	EC50 (48h) = 89.59 mg/L		
Silanetriol, methyl-, triacetate 4253-34-3	EC50 (72h): >500 mg/l (Pseudokirchnerella subcapitata)	LC50 (96h) >500 mg/l (Brachydanio rerio)	-	EC50 (48h) >500 mg/l (Daphnia magna)		
Octamethylcyclotetrasiloxane [D4] 556-67-2	-	LC50: >1000mg/L (96h, Lepomis macrochirus) LC50: >500mg/L (96h, Brachydanio rerio)	-	EC50: =25.2mg/L (24h, Daphnia magna)		10

12.2. Persistence and degradability

Persistence and degradability No information available.

Silica, amorphous (7631-86-9)

Method	Exposure time	Value	Results
			The methods for determining biodegradability are not applicable to inorganic substances

Octamethylcyclotetrasiloxane [D4] (556-67-2)

12.3. Bioaccumulative potential

Bioaccumulation

Component Information

Chemical name	Partition coefficient
Triacetoxy(propyl)silane	1.23
Silanetriol, methyl-, triacetate	-2.4
Octamethylcyclotetrasiloxane [D4]	6.49

12.4. Mobility in soil

Mobility in soil No information available.

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment

Chemical name	PBT and vPvB assessment
Silica, amorphous	The substance is not PBT / vPvB PBT assessment does not apply
Triacetoxy(propyl)silane	The substance is not PBT / vPvB
Silanetriol, methyl-, triacetate	The substance is not PBT / vPvB
Octamethylcyclotetrasiloxane [D4]	PBT & vPvB

12.6. Endocrine disrupting properties

Endocrine disrupting properties No information available.

Component Information		
Octamethylcyclotetrasiloxane [D4] (556-67-2)		
Method	Results	Species
Endocrine disrupting properties in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100(3) or Commission Regulation (EU) 2018/605(4).	Negative.	

12.7. Other adverse effects
No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused products Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable.

Contaminated packaging Handle contaminated packages in the same way as the product itself.

European Waste Catalogue 08 04 09* waste adhesives and sealants containing organic solvents or other dangerous substances

Other information Waste codes should be assigned by the user based on the application for which the product was used.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1 UN number or ID number Not regulated
14.2 Proper Shipping Name Not regulated
14.3 Transport hazard class(es) Not regulated
14.4 Packing group Not regulated
14.5 Environmental hazards Not applicable
14.6 Special Provisions None

IMDG

14.1 UN number or ID number Not regulated
14.2 Proper Shipping Name Not regulated
14.3 Transport hazard class(es) Not regulated
14.4 Packing group Not regulated
14.5 Marine pollutant NP
14.6 Special Provisions None
14.7 Maritime transport in bulk according to IMO instruments Not applicable

Air transport (ICAO-TI / IATA-DGR)

14.1 UN number or ID number Not regulated
14.2 Proper Shipping Name Not regulated
14.3 Transport hazard class(es) Not regulated
14.4 Packing group Not regulated
14.5 Environmental hazards Not applicable

14.6 Special Provisions None

Section 15: REGULATORY INFORMATION

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

European Union

Registration, Evaluation, Authorization, and Restriction of Chemicals (REACh) Regulation (EC 1907/2006)

SVHC: Substances of Very High Concern for Authorisation:
This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No. 1907/2006 (REACH), Article 59)

EU-REACH (1907/2006) - Annex XVII - Substances subject to Restriction
This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII).

Substance subject to authorisation per REACH Annex XIV
This product does not contain substances subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV)

Ozone-depleting substances (ODS) regulation (EC) 1005/2009
Not applicable

Persistent Organic Pollutants
Not applicable

National regulations

France

Occupational Illnesses (R-463-3, France)

Chemical name	French RG number
Silica, amorphous 7631-86-9	RG 25

Germany

Ordinance on Industrial Safety and Health - Germany - BetrSichV
No flammable liquids in accordance with BetrSichV

Water hazard class (WGK) obviously hazardous to water (WGK 2)

Netherlands

List of Carcinogenic, mutagenic and reproductive toxin substances in accordance with Inspectorate SZW (Netherlands)
Not Listed

Chemical name	Netherlands - List of Carcinogens

Octamethylcyclotetrasiloxane [D4] 556-67-2	Fertility (Category 2)

Denmark
Registration number(s) (P-no.) No information available
Norway
Registration number(s) (PRN-no.) No information available

15.2. Chemical safety assessment

Chemical Safety Assessments have been carried out by the Reach registrants for substances registered at >10 tpa. No Chemical Safety Assessment has been carried out for this mixture.

SECTION 16: Other information

Key or legend to abbreviations and acronyms used in the safety data sheet

Full text of H-Statements referred to under section 3
EUH014 - Reacts violently with water
EUH071 - Corrosive to the respiratory tract
H226 - Flammable liquid and vapour
H302 - Harmful if swallowed
H314 - Causes severe skin burns and eye damage
H361f - Suspected of damaging fertility
H410 - Very toxic to aquatic life with long lasting effects

SVHC: Substances of Very High Concern for Authorisation:
PBT: Persistent, Bioaccumulative, and Toxic (PBT) Chemicals
vPvB: Very Persistent and very Bioaccumulative (vPvB) Chemicals
STOT RE: Specific target organ toxicity - Repeated exposure
STOT SE: Specific target organ toxicity - Single exposure
EWC: European Waste Catalogue
LOW: List of Wastes (see http://ec.europa.eu/environment/waste/framework/list.htm)
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
IATA: International Air Transport Association
ICAO: ICAO-TI: Technical Instructions for the Safe Transport of Dangerous Goods by Air
IMDG: International Maritime Dangerous Goods
RID: Regulations concerning the International Carriage of Dangerous Goods by Rail

Legend SECTION 8: Exposure controls/personal protection

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
AGW	Occupational exposure limit value	BGW	Biological limit value
Ceiling	Maximum limit value	*	Skin designation

Classification procedure	
Classification according to Regulation (EC) No. 1272/2008 [CLP]	Method Used
Acute oral toxicity	Calculation method
Acute dermal toxicity	Calculation method
Acute inhalation toxicity - gas	Calculation method
Acute inhalation toxicity - Vapour	Calculation method
Acute inhalation toxicity - dust/mist	Calculation method
Skin corrosion/irritation	On basis of test data
Serious eye damage/eye irritation	On basis of test data
Respiratory sensitisation	Calculation method
Skin sensitisation	Calculation method
mutagenicity	Calculation method
Carcinogenicity	Calculation method
Reproductive toxicity	Calculation method
STOT - single exposure	Calculation method
STOT - repeated exposure	Calculation method
Acute aquatic toxicity	Calculation method

Chronic aquatic toxicity	Calculation method
Aspiration hazard	Calculation method
Ozone	Calculation method

Key literature references and sources for data used to compile the SDS
European Food Safety Authority (EFSA)
European Chemicals Agency (ECHA) Committee for Risk Assessment (ECHA_RAC)
European Chemicals Agency (ECHA) (ECHA_API)
EPA (Environmental Protection Agency)
Acute Exposure Guideline Level(s) (AEGL(s))
International Uniform Chemical Information Database (IUCLID)
National Institute of Technology and Evaluation (NITE)
NIOSH (National Institute for Occupational Safety and Health)
Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications
Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme
Organisation for Economic Co-operation and Development Screening Information Data Set

Prepared By Product Safety & Regulatory Affairs

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Training Advice No information available

Further information No information available

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer
The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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, unless specified in the text.

End of Safety Data Sheet