

**Den Braven****Safety data sheet**
according to 1907/2006/EC, Article 31

Printing date 19.12.2018

Version number 12

Revision: 18.12.2018

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1 Product identifier**· **Trade name:** ZWALUW SILICONE 321**1.2 Relevant identified uses of the substance or mixture and uses advised against****Sector of Use**

SU21 Consumer uses: Private households / general public / consumers

SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

· **Application of the substance / the mixture** Sealant**1.3 Details of the supplier of the safety data sheet****Manufacturer/Supplier:**

DEN BRAVEN

Denariusstraat 11

4903 RC Oosterhout

The Netherlands

Tel: +31 (0)162-491000

Fax: +31 (0)162-421217

E-mail: info@denbraven.com

Internet: www.denbraven.com

Further information obtainable from:

Product safety department.

info@denbraven.com

1.4 Emergency telephone number:

info@denbraven.com

Tel.: +31 (0)162-491000

SECTION 2: Hazards identification**2.1 Classification of the substance or mixture****Classification according to Regulation (EC) No 1272/2008**

The product is tested according 92/69/EC and is not classified as irritating to skin and eyes.

The product is not classified, according to the CLP regulation.

2.2 Label elements· **Labelling according to Regulation (EC) No 1272/2008** Void· **Hazard pictograms** Void· **Signal word** Void· **Hazard statements** Void**Additional information:**

Contains 4,5-dichloro-2-octyl-2H-isothiazol-3-one. May produce an allergic reaction.

Safety data sheet available on request.

2.3 Other hazards**Results of PBT and vPvB assessment****PBT:**

556-67-2 octamethylcyclotetrasiloxane

vPvB:

556-67-2 octamethylcyclotetrasiloxane

541-02-6 2,2,4,4,6,6,8,8,10,10-decamethylcyclopentasiloxane

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540-97-6 dodecamethylcyclohexasiloxane (D6)

SECTION 3: Composition/information on ingredients

· 3.2 Chemical characterisation: Mixtures

· **Description:** Mixture of substances listed below with nonhazardous additions.

· **Dangerous components:**

EC number: 932-078-5 Reg.nr.: 01-2119827000-58-xxxx	Hydrocarbons, C13-C23, n-alkanes, isoalkanes, cyclics, < 0.03% aromatics ⚠ Asp. Tox. 1, H304	10-<30%
CAS: 17865-07-5 EINECS: 241-816-9 Reg.nr.: 01-2119966899-07-xxxx	triacetoxyp(ropyl)silane ⚠ Skin Corr. 1B, H314	1-<5%
CAS: 4253-34-3 EINECS: 224-221-9 Reg.nr.: 01-2119962266-32-xxxx	methylsilanetriyl triacetate ⚠ Skin Corr. 1B, H314; ⚠ Acute Tox. 4, H302	1-<5%
CAS: 556-67-2 EINECS: 209-136-7 Reg.nr.: 01-2119529238-36-xxxx	octamethylcyclotetrasiloxane PBT; vPvB ⚠ Flam. Liq. 3, H226; ⚠ Repr. 2, H361f; Aquatic Chronic 4, H413	0.1-<1%
CAS: 541-02-6 EINECS: 208-764-9 Reg.nr.: 01-2119511367-43-xxxx	2,2,4,4,6,6,8,8,10,10-decamethylcyclopentasiloxane non-classified vPvB substance	0.1-<1%
CAS: 540-97-6 EINECS: 208-762-8 Reg.nr.: 01-2119517435-42-xxxx	dodecamethylcyclohexasiloxane (D6) non-classified vPvB substance	0.1-<1%

· **SVHC**

556-67-2	octamethylcyclotetrasiloxane
541-02-6	2,2,4,4,6,6,8,8,10,10-decamethylcyclopentasiloxane
540-97-6	dodecamethylcyclohexasiloxane (D6)

· **Additional information:** For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

· 4.1 Description of first aid measures

· **General information:** No special measures required.

· **After inhalation:** Supply fresh air; consult doctor in case of complaints.

· **After skin contact:** Generally the product does not irritate the skin.

· **After eye contact:** Rinse opened eye for several minutes under running water.

· **After swallowing:** If symptoms persist consult doctor.

· **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.

· **4.3 Indication of any immediate medical attention and special treatment needed**

No further relevant information available.

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SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Ensure adequate ventilation
- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Pick up mechanically.
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** Use only in well ventilated areas.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.
- **8.1 Control parameters**
- **Ingredients 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 valid during the making were used as basis.
- **8.2 Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:**
The usual precautionary measures are to be adhered to when handling chemicals.
- **Respiratory protection:** Not required.
- **Protection of hands:**
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

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

- **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:** Goggles recommended during refilling

SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**

- **General Information**

- **Appearance:**

Form:	Pasty
Colour:	Various colours
Odour:	Like ethanoic acid
Odour threshold:	Not determined.

- **pH-value:** Undetermined.
Not determined.

- **Change in condition**

Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	>300 °C

- **Flash point:** > 60 °C

- **Flammability (solid, gas):** Not applicable.

- **Ignition temperature:** >200 °C

- **Decomposition temperature:** Not determined.

- **Auto-ignition temperature:** Product is not selfigniting.

- **Explosive properties:** Product does not present an explosion hazard.

- **Explosion limits:**

Lower:	Undetermined.
Upper:	Undetermined.

- **Vapour pressure:** Undetermined.

- **Density at 20 °C:** 1.01 g/cm³
- **Relative density** Not determined.
- **Vapour density** Not determined.
- **Evaporation rate** Not determined.

- **Solubility in / Miscibility with water:**

Not miscible or difficult to mix.

- **Partition coefficient: n-octanol/water:** Not determined.

- **Viscosity:**

Dynamic:	Not determined.
Kinematic:	Not determined.

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- **Solvent content:**
- VOC (EC) 0.00 %
- VOC (EC) 0.0 g/l
- **9.2 Other information** No further relevant information available.

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.

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

Hydrocarbons, C13-C23, n-alkanes, isoalkanes, cyclics, < 0.03% aromatics

Oral	LD50	>5,000 mg/kg (rat)
Dermal	LD50	>3,160 mg/kg (rabbit)
Inhalative	LC50/4 h	>5,266 mg/l (rat)

- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**
- **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.
- **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.

SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 Mobility in soil** No further relevant information available.

- **Additional ecological information:**

- **General notes:**

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

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· 12.5 Results of PBT and vPvB assessment
· PBT:

556-67-2	octamethylcyclotetrasiloxane
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· vPvB:

556-67-2	octamethylcyclotetrasiloxane
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540-97-6	dodecamethylcyclohexasiloxane (D6)

· 12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

· 13.1 Waste treatment methods
· Recommendation Disposal must be made according to official regulations.

· European waste catalogue

08 04 10	waste adhesives and sealants other than those mentioned in 08 04 09
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· Uncleaned packaging:
· Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport information

· 14.1 UN-Number
· ADR, ADN, IMDG, IATA Void

· 14.2 UN proper shipping name
· ADR, ADN, IMDG, IATA Void

· 14.3 Transport hazard class(es)
· ADR, ADN, IMDG, IATA
· Class Void

· 14.4 Packing group
· ADR, IMDG, IATA Void

· 14.5 Environmental hazards:
· Marine pollutant: No

· 14.6 Special precautions for user

Not applicable.

· 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

Not applicable.

· UN "Model Regulation":

Void

SECTION 15: Regulatory information

· 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
· Labelling of 'treated articles' according to Regulation (EU) 528/2012, Article 58

This product contains a biocidal product for the preservation of the dry film.

Contains: 4,5 dichloro-2-octyl-2H-isothiazol-3-one (CAS: 64359-81-5)

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- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.

- **National regulations:**

- **Other regulations, limitations and prohibitive regulations -**

- **Substances of very high concern (SVHC) according to REACH, Article 57**

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540-97-6	dodecamethylcyclohexasiloxane (D6)

- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 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.

- **Relevant phrases**

- H226 Flammable liquid and vapour.
- H302 Harmful if swallowed.
- H304 May be fatal if swallowed and enters airways.
- H314 Causes severe skin burns and eye damage.
- H361f Suspected of damaging fertility.
- H413 May cause long lasting harmful effects to aquatic life.

- **Department issuing SDS:** Product safety department.

- **Contact:** Pascal Timmermans / Kees van Bommel

- **Abbreviations and acronyms:**

- ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
- IMDG: International Maritime Code for Dangerous Goods
- IATA: International Air Transport Association
- GHS: Globally Harmonised System of Classification and Labelling of Chemicals
- EINECS: European Inventory of Existing Commercial Chemical Substances
- ELINCS: European List of Notified Chemical Substances
- CAS: Chemical Abstracts Service (division of the American Chemical Society)
- VOC: Volatile Organic Compounds (USA, EU)
- LC50: Lethal concentration, 50 percent
- LD50: Lethal dose, 50 percent
- PBT: Persistent, Bioaccumulative and Toxic
- SVHC: Substances of Very High Concern
- vPvB: very Persistent and very Bioaccumulative
- Flam. Liq. 3: Flammable liquids – Category 3
- Acute Tox. 4: Acute toxicity – Category 4
- Skin Corr. 1B: Skin corrosion/irritation – Category 1B
- Repr. 2: Reproductive toxicity – Category 2
- Asp. Tox. 1: Aspiration hazard – Category 1
- Aquatic Chronic 4: Hazardous to the aquatic environment - long-term aquatic hazard – Category 4

- *** Data compared to the previous version altered.**