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

1.1 Product identifier

Trade name: ZWALUW SILICONE-NO

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 not classified, according to the CLP regulation.

2.2 Label elements

Labeling according to Regulation (EC) No 1272/2008 Void

Hazard pictograms Void
Signal word Void
Hazard statements Void
Additional information:
Contains 2-butanone oxime, 3-aminopropyltriethoxysilane. 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 octamethycyclosiloxane

vPvB:
540-97-6 dodecamethycyclohexasiloxane (D6)
541-02-6 2,2,4,4,6,6,8,8,10,10-decamethycyclopentasiloxane
556-67-2 octamethycyclosiloxane

(Contd. on page 2)
Trade name: ZWALUW SILICONE-NO

SECTION 3: Composition/information on ingredients

- **3.2 Chemical characterisation: Mixtures**
- **Description:** Mixture of substances listed below with nonhazardous additions.

**Dangerous components:**

<table>
<thead>
<tr>
<th>CAS</th>
<th>EINECS</th>
<th>Reg.nr.: 01-2119517435-42-xxxx</th>
<th>Description</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>540-97-6</td>
<td>208-762-8</td>
<td></td>
<td>dodecamethylcyclohexasiloxane (D6)</td>
<td>0.1-&lt;1%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>non-classified vPvB substance</td>
<td></td>
</tr>
<tr>
<td>541-02-6</td>
<td>208-764-9</td>
<td>01-2119511367-43-xxxx</td>
<td>2,2,4,4,6,6,8,8,10,10-decamethylcyclopentasiloxane</td>
<td>0.1-&lt;1%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>non-classified vPvB substance</td>
<td></td>
</tr>
<tr>
<td>556-67-2</td>
<td>209-136-7</td>
<td>01-2119529238-36-xxxx</td>
<td>octamethylcyclotetrasiloxane</td>
<td>0.1-&lt;1%</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>PBT; vPvB; Flam. Liq. 3, H226; Repr. 2, H361f; Aquatic Chronic 4, H413</td>
<td></td>
</tr>
</tbody>
</table>

**SVHC**

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

**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.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.

- **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.
    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 trough 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

(Contd. of page 4)
## 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:** 2-butanonoxim

---

### Other information

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colour</td>
<td>Various colours</td>
</tr>
<tr>
<td>Odour</td>
<td>Characteristic</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>Not determined.</td>
</tr>
<tr>
<td>pH-value</td>
<td>Undetermined.</td>
</tr>
<tr>
<td>Change in condition</td>
<td>Undetermined.</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>Undetermined.</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>&gt;300 °C</td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt;100 °C</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Ignition temperature</td>
<td>&gt;200 °C</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>Product is not selfigniting.</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>Product does not present an explosion hazard.</td>
</tr>
<tr>
<td>Explosion limits</td>
<td>Undetermined.</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>Undetermined.</td>
</tr>
<tr>
<td>Density at 20 °C</td>
<td>1.02 g/cm³</td>
</tr>
<tr>
<td>Relative density</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Vapour density</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Solubility in / Miscibility with water</td>
<td>Not miscible or difficult to mix.</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Dynamic</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Kinematic</td>
<td>Not determined.</td>
</tr>
<tr>
<td>Solvent content</td>
<td></td>
</tr>
<tr>
<td>VOC (EC)</td>
<td>0.00 %</td>
</tr>
<tr>
<td>VOC (EC)</td>
<td>0.0 g/l</td>
</tr>
<tr>
<td>9.2 Other information</td>
<td>No further relevant information available.</td>
</tr>
</tbody>
</table>
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:**

<table>
<thead>
<tr>
<th>Compound</th>
<th>Oral LD50</th>
<th>Dermal LD50</th>
<th>Inhalative LC50/4 h</th>
</tr>
</thead>
<tbody>
<tr>
<td>96-29-7 2-butanone oxime</td>
<td>3,700 mg/kg (rat)</td>
<td>200-2,000 mg/kg (rat)</td>
<td>20 mg/l (rat)</td>
</tr>
</tbody>
</table>

- **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.
    - **12.5 Results of PBT and vPvB assessment**
      - **PBT:**
        - 556-67-2 octamethylcyclotetrasiloxane
      - **vPvB:**
        - 540-97-6 dodecamethylcyclohexasiloxane (D6)
        - 541-02-6 2,2,4,4,6,6,8,8,10,10-decamethylcyclopentasiloxane
        - 556-67-2 octamethylcyclotetrasiloxane
    - **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
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: 2-octyl-2H-isothiazol-3-one (CAS: 26530-20-1)

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

- **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.
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 Bemmel

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
Repr. 2: Reproductive toxicity – Category 2
Aquatic Chronic 4: Hazardous to the aquatic environment - long-term aquatic hazard – Category 4

* Data compared to the previous version altered.