

according to Regulation (EC) No. 1907/2006
Revision date: 11.11.2022 Version 1.9

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Expansion liquid type 140

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

1.1. Product identifier

Identification of the substance or preparation:

Commercial product name: Expansion liquid type 140

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

Use of the Substance/Mixture Inorganic binder, surface modifier and flocculating agent.

This substance/ mixture contains nanoforms

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier: SILADENT Dr. Böhme & Schöps GmbH

Street / mailbox: Im Klei 26

Country code. / postal code / city: DE - 38644 Goslar

Phone: +49 (0) 53 21 / 37 79 - 0

Fax: +49 (0) 53 21 / 38 96 32

E-mail / Website: info@siladent.de / www.siladent.de

Further information obtainable from: SILADENT Dr. Böhme & Schöps GmbH

1.4 Emergency telephone number

SILADENT Dr. Böhme & Schöps GmbH: +49 (0) 53 21 / 37 79 - 0 (Mon-Fri. 8 a.m. - 4 p.m.)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008): Not a hazardous substance or mixture.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008): Not a hazardous substance or mixture.

2.3 Other hazards:

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature: Amorphous Silica, aqueous colloidal solution.

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Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
Substances with a workplace exposure limit:			
Silicon dioxide, amorphous	7631-86-9 231-545-4 01-2119379499-16		>= 40 - < 50

For explanation of abbreviations see section 16.

Remarks: Substances with a workplace exposure limit
 This substance/ mixture contains nanoforms

Components:

Silicon dioxide, amorphous:

Particle characteristics

Particle size:

Particle Size Distribution:

Assessment:

Further particle properties for nanomaterials see section 9
 Further particle properties for nanomaterials see section 9
 Assessment: This substance/ mixture contains nanoforms
 based on: Measurement data

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice:

No hazards which require special first aid measures.

If inhaled:

If breathed in, move person into fresh air. If symptoms persist, call a physician.

In case of skin contact:

Remove contaminated clothing and shoes. Rinse with water.

In case of eye contact:

Rinse with plenty of water.
 Remove contact lenses.
 Protect unharmed eye.
 Keep eye wide open while rinsing.

If swallowed:

Clean mouth with water and drink afterwards plenty of water.
 Never give anything by mouth to an unconscious person.

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

Symptoms:

No information available.

Risks:

No information available.

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

Treatment:

Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Suitable extinguishing agents:

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

5.2 Special hazards during firefighting:

No hazards to be specially mentioned.

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Specific hazards arising from the chemical combustion products: No hazardous combustion products are known.

5.3 Advice for firefighters
Special protective equipment for firefighters: In the event of fire, wear self-contained breathing apparatus.

Further information: Standard procedure for chemical fires.

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures**
Personal precautions: No conditions to be specially mentioned. Follow safe handling advice and personal protective equipment recommendations.
- 6.2 Environmental precautions:** No special environmental precautions required.
- 6.3 Methods and materials for containment and cleaning up:** Wipe up with absorbent material (e.g. cloth, fleece). Keep in suitable, closed containers for disposal. If liquid has been spilt in large quantities clean up promptly by scoop or vacuum.
- 6.4 Reference to other sections**
Additional advice: For disposal considerations see section 13. For personal protection see section 8.

SECTION 7: Handling and storage

- 7.1 Precautions for safe handling**
Advice on safe handling: For personal protection, see section 8. No special handling advice required.
- Information about fire- and explosion protection:** Normal measures for preventive fire protection.
- Hygiene measures:** General industrial hygiene practice.
- 7.2 Conditions for safe storage, including any incompatibilities**
Requirements for storage areas and containers: Keep container tightly closed in a dry and well-ventilated place. Keep away from direct sunlight.
- Further information on storage conditions:** Do not freeze. May cause mild eye and skin irritation. Skin contact may cause dehydration. In case of spill or leak: Flush with water. Keep away from direct sunlight. Maximum storage duration 18 months
- Advice on common storage:** No special restrictions on storage with other products.
- Storage class (TRGS 510):** 12
- Further information on storage stability:** No decomposition if stored and applied as directed.
- Minimum storage temperature:** Avoid temperatures below: 5 °C
- Maximum storage temperature:** 50 °C

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7.3 Specific end use(s): No information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Components with workplace control parameters:

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
Silicon dioxide, amorphous	7631-86-9	AGW (Inhalable fraction)	4 mg/m ³ (Silica)	DE TRGS 900
Further Information:	When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child			

8.2 Exposure controls:

Engineering Controls:

Effective exhaust ventilation system.

Personal protective equipment

Eye/face protection:

Safety glasses

Hand protection

Material:

PVC

Material:

Rubber gloves

Respiratory protection:

No personal respiratory protective equipment normally required.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state:	liquid
Colour:	white
Odour:	odourless
Odour threshold:	No data available.
Melting point / Melting range:	0°C
Boiling point / Boiling range:	100°C
Flammability:	Not applicable
Upper explosion limit / Upper flammability limit:	Not applicable
Lower explosion limit / Lower flammability limit:	Not applicable
Flash point:	Not applicable
Auto-ignition temperature:	Not applicable
Decomposition temperature:	No data available
ph:	9 - 11
Viscosity	
Viscosity, dynamic:	< 20 mPa.s (20 °C)
Viscosity, kinematic:	No data available
Solubility(ies)	
Water solubility:	dispersible
Solubility in other solvents:	No data available
Partition coefficient: n- octanol/water:	Not applicable
Vapour pressure:	ca. 23 hPa (20 °C)
Relative density:	1,200 - 1,400
Relative vapour density:	No data available
Particle characteristics:	
Assessment	Assessment: This substance/ mixture contains nanoforms

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<p>12.2 Persistence and degradability Biodegradability:</p> <p>Biochemical Oxygen Demand (BOD):</p>	<p>Result: Not applicable Remarks: inorganic</p> <p>Result: Not applicable inorganic</p> <p>Remarks: No data available</p>
<p>12.3 Bioaccumulative potential Product: Bioaccumulation:</p>	<p>Remarks: No bioaccumulation is expected.</p>
<p>12.4 Mobility in soil Product: Mobility:</p> <p>Distribution among environmental compartments:</p>	<p>Remarks: No test results, Under extreme circumstances, transport from earth to water may take place.</p> <p>Remarks: Transport to air is not expected.</p>
<p>12.5 Results of PBT and vPvB assessment Product: Assessment:</p>	<p>This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.</p>
<p>12.6 Endocrine disrupting properties Product: Assessment:</p>	<p>The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.</p>
<p>12.7 Other adverse effects Product: Additional ecological information:</p>	<p>None known.</p>

SECTION 13: Disposal considerations

<p>13.1 Waste treatment methods Contaminated packaging:</p>	<p>Empty remaining contents. Empty containers should be taken to an approved waste handling site for recycling or disposal.</p>
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SECTION 14: Transport information

<p>14.1 UN number or ID number: ADN: ADR: RID: IMDG: IATA_P:</p>	<p>Not regulated as a dangerous good Not regulated as a dangerous good Not regulated as a dangerous good Not regulated as a dangerous good Not regulated as a dangerous good</p>
<p>14.2 UN proper shipping name: ADN: ADR: RID:</p>	<p>Not regulated as a dangerous good. Not regulated as a dangerous good Not regulated as a dangerous good Not regulated as a dangerous good</p>

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<p>IMDG: IATA_P:</p>	<p>Not regulated as a dangerous good Not regulated as a dangerous good</p>
<p>14.3 Transport hazardous class: ADN: ADR: RID: IMDG: IATA_P:</p>	<p>Not regulated as a dangerous good. Not regulated as a dangerous good Not regulated as a dangerous good Not regulated as a dangerous good Not regulated as a dangerous good Not regulated as a dangerous good</p>
<p>14.4 Packing group: ADN: ADR: RID: IMDG: IATA_P:</p>	<p>Not regulated as a dangerous good. Not regulated as a dangerous good Not regulated as a dangerous good Not regulated as a dangerous good Not regulated as a dangerous good Not regulated as a dangerous good</p>
<p>14.5 Environmental hazards:</p>	<p>Not regulated as a dangerous good.</p>
<p>14.6 Special precautions for user: Remarks:</p>	<p>Not classified as dangerous in the meaning of transport regulations.</p>
<p>14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:</p>	<p>Not applicable for product as supplied.</p>

SECTION 15: Regulatory information

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

<p>REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII):</p>	<p>Not applicable</p>
<p>REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59):</p>	<p>Not applicable</p>
<p>Regulation (EC) No 1005/2009 on substances that deplete the ozone layer:</p>	<p>Not applicable</p>
<p>Regulation (EC) 850/2004 on persistent organic pollutants:</p>	<p>Not applicable</p>
<p>Regulation (EC) No 850/2004 on persistent organic pollutants:</p>	<p>Not applicable</p>
<p>Regulation (EC) No 649/2012 of the European Parliament and Council concerning the export and import of dangerous chemicals:</p>	<p>Not applicable</p>
<p>Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances:</p>	<p>Not applicable</p>

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Water hazard class (Germany):	nwg not water endangering Classification according to AwSV, Annex (2.2)
TA Luft List (Germany):	Total dust: Not applicable Inorganic substances in powdered form: Not applicable Inorganic substances in vapour or gaseous form: Not applicable Organic Substances: Not applicable Carcinogenic substances: Not applicable Mutagenic: Not applicable Toxic to reproduction: Not applicable

The components of this product are reported in the following inventories:

TSCI:	On the inventory, or in compliance with the inventory
TSCA:	All substances listed as active on the TSCA inventory
AIC:	On the inventory, or in compliance with the inventory
DSL:	All components of this product are on the Canadian DSL
ENCS:	On the inventory, or in compliance with the inventory
ISHL:	On the inventory, or in compliance with the inventory
Keco:	On the inventory, or in compliance with the inventory
PICCS:	On the inventory, or in compliance with the inventory
IECSC:	On the inventory, or in compliance with the inventory
NZIoC:	On the inventory, or in compliance with the inventory

15.2 Chemical Safety Assessment:

Product information:	not required
Silicon dioxide, amorphous:	A Chemical Safety Assessment is not required for this substance.

SECTION 16: Other information

Full text of other abbreviations

DE TRGS 900:	Germany. TRGS 900 - Occupational exposure limit values
DE TRGS 900 / AGW :	Time Weighted Average

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic

