

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



BREAK-THRU® S 301

Version 1.8 / REG_EU
Revision Date: 20.05.2022

Specification: 201463
Material no.:

Date of first issue: 22.04.2020
Print Date: 24.05.2022

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

1.1 Product identifier

Trade name : BREAK-THRU® S 301
Registration number : if available listed in Chapter. 3
CAS-No. : 134180-76-0
EC-No. : 603-798-4

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

Use of the Sub-
stance/Mixture : For industrial use

1.3 Details of the supplier of the safety data sheet

Company : Alzchem Trostberg GmbH
Dr.-Albert-Frank-Str. 32
83308 Trostberg, Germany
Telephone : +49 8621 86-3351
E-mail address of person
responsible for the SDS : alz-pst@alzchem.com

1.4 Emergency telephone number

Emergency telephone num-
ber : +49 8621 86-2776
Alzchem Trostberg GmbH, Fire Brigade

SECTION 2: Hazards identification


2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Acute toxicity, Category 4 : H332: Harmful if inhaled.
Eye irritation, Category 2 : H319: Causes serious eye irritation.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms : 
Signal word : Warning
Hazard statements : H319 Causes serious eye irritation.
H332 Harmful if inhaled.

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Precautionary statements : **Prevention:**
P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P264 Wash hands thoroughly after handling.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
Response:
P312 Call a POISON CENTER/ doctor if you feel unwell.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313 If eye irritation persists: Get medical advice/ attention.

2.3 Other hazards

A PBT/vPvB evaluation is not available, since a chemical safety evaluation is not required / has not been carried out

SECTION 3: Composition/information on ingredients

3.1 Substances

Substance name : Polyethersiloxan

Components

Chemical name	CAS-No. EC-No.	Concentration (% w/w)	M-Factor, SCL, ATE
Polyether modified Trisiloxane	134180-76-0 603-798-4	>= 75	

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice : Seek medical advice in case of symptoms caused by eye or skin contact, inhalation or swallowing.
If inhaled : Remove to fresh air.
In case of skin contact : Wash off with plenty of water and soap.
In case of eye contact : Open the eyes and rinse thoroughly with plenty of water.
If swallowed : Clean mouth with water and drink afterwards plenty of water.

4.2 Most important symptoms and effects, both acute and delayed

None known.

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4.3 Indication of any immediate medical attention and special treatment needed

Treatment : Symptomatic treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Water spray, foam, CO₂, dry powder.

Unsuitable extinguishing media : high volume water jet

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products : carbon dioxide
Carbon monoxide
silica

5.3 Advice for firefighters

Special protective equipment for firefighters : In the case of fire, wear respiratory protective equipment independent of surrounding air and chemical protective suit.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Wear personal protective equipment; see section 8.
Assure sufficient ventilation.

6.2 Environmental precautions

Environmental precautions : Product or extinguishing water with product must not be allowed to enter soil, sewers or natural bodies of water.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Absorb with liquid-binding material, e. g.: diatomaceous earth, sand, universal binder
Keep in suitable, closed containers for disposal.
Ventilate room thoroughly

6.4 Reference to other sections

For disposal considerations see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Provide sufficient ventilation and exhaust at the workplace.
Do not allow individual / bulk containers to stand open

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Advice on protection against fire and explosion : No special precautions required.

Hygiene measures : Avoid contact with skin, eyes and clothing. Do not inhale vapours / aerosols. Wash contact areas after handling. Take off clothing and shoes contaminated with product. Clean before reuse. Do not eat, drink, smoke, or sniff while at work. Wash your hands and/or face before breaks and before termination of work. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Further information on storage conditions : Keep containers tightly closed in a dry, cool and well-ventilated place.

Storage class (TRGS 510) : 10, Combustible liquids

7.3 Specific end use(s)

Specific use(s) : We are unaware of any specific end uses which go beyond the data reported in Section 1.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Contains no substances with occupational exposure limit values.

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health effects	Value
Polyether modified Trisiloxane	DNEL not necessary (polymer)			

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
Polyether modified Trisiloxane	PNEC not necessary (polymer)	

8.2 Exposure controls

Personal protective equipment

Eye protection : Safety glasses

Hand protection

Material : Nitrile rubber, Recommendation: Camatril 730
Break through time : 480 min
Glove thickness : 0,11 mm
Manufacturer : Kächele-Cama Latex GmbH (KCL), Germany

Skin and body protection : Protective clothing
If intensive contact with the hazardous material cannot be avoided with certainty, order (depending on the hazard involved) additional protective measures for example chemical

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protective suit.

Respiratory protection : If aerosol or mists are formed:
use respiratory equipment with suitable filter.
Suitable filter: A-P2, code colour brown-white

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state : liquid

Colour : yellow

Odour : characteristic

Melting point/range : < 0 °C

Boiling point/boiling range : > 200 °C

Upper explosion limit / upper flammability limit : not determined

Lower explosion limit / Lower flammability limit : not determined

Flash point : > 149 °C
Method: DIN 2719

pH : 6 - 8 (25 °C)
Concentration: 4 %

Viscosity

Viscosity, dynamic : 50 - 100 mPa.s (25 °C)

Viscosity, kinematic : 45 - 91 mm²/s (25 °C)
Method: calculated

Solubility(ies)

Water solubility : soluble

Partition coefficient: n-octanol/water : not determined

Vapour pressure : not determined

Density : 1,0 - 1,1 g/cm³ (25 °C)
Method: DIN 51757

9.2 Other information

Explosives : no data available

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Oxidizing properties : not applicable
Self-ignition : 335 °C

SECTION 10: Stability and reactivity

10.1 Reactivity

See section 10.3

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions

Hazardous reactions : No hazardous reactions are known if properly handled and stored.

10.4 Conditions to avoid

Conditions to avoid : No specific hazards are known.

10.5 Incompatible materials

Materials to avoid : None known.

10.6 Hazardous decomposition products

When correctly handled:
None known

SECTION 11: Toxicological information

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

Acute toxicity

Product:

Acute inhalation toxicity : Assessment: Harmful if inhaled.

Components:

Polyether modified Trisiloxane:

Acute oral toxicity : LD50 (rat): 3200 mg/kg
Method: OECD Test Guideline 401
Assessment: Based on available data, the classification criteria are not met.
Remarks: The data are derived from the evaluations or test results achieved with similar products (conclusion by analogy).
literature

Acute inhalation toxicity : LC50 (rat): 1,08 mg/l
Exposure time: 4 h
Test atmosphere: Aerosol

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Method: OECD Test Guideline 403
Assessment: Harmful if inhaled.
Remarks: The data are derived from the evaluations or test results achieved with similar products (conclusion by analogy).
literature

Acute dermal toxicity : LD50 (rat): > 2000 mg/kg
Remarks: The data are derived from the evaluations or test results achieved with similar products (conclusion by analogy).
literature

Skin corrosion/irritation

Components:

Polyether modified Trisiloxane:

Result : not irritating
Remarks : The data are derived from the evaluations or test results achieved with similar products (conclusion by analogy).
literature

Serious eye damage/eye irritation

Product:

Assessment : Causes serious eye irritation.

Components:

Polyether modified Trisiloxane:

Species : Rabbit
Result : highly irritative
Remarks : The data are derived from the evaluations or test results achieved with similar products (conclusion by analogy).
literature

Respiratory or skin sensitisation

Components:

Polyether modified Trisiloxane:

Species : Guinea pig
Result : not sensitizing
Remarks : The data are derived from the evaluations or test results achieved with similar products (conclusion by analogy).
literature

Germ cell mutagenicity

Components:

Polyether modified Trisiloxane:

Genotoxicity in vitro : Test Type: Chromosome aberration test in vitro

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Test system: Chinese hamster ovary cells
Metabolic activation: with or without
Method: OECD TG 473
Result: Non clastogenic
Remarks: The data are derived from the evaluations or test results achieved with similar products (conclusion by analogy). literature

Genotoxicity in vivo : Test Type: In vivo micronucleus test
Species: Mouse
Application Route: intraperitoneal
Result: negative
Remarks: The data are derived from the evaluations or test results achieved with similar products (conclusion by analogy). literature

Germ cell mutagenicity- Assessment : negative in the in vitro chromosome aberration test, Not mutagenic in the micronucleus test with mice., This information is derived from evaluation of or a test result for a similar compound (conclusion based on analogy)., literature

Carcinogenicity

Components:

Polyether modified Trisiloxane:

Carcinogenicity - Assessment : No data available

Reproductive toxicity

Components:

Polyether modified Trisiloxane:

Reproductive toxicity - Assessment : No data available

STOT - single exposure

Components:

Polyether modified Trisiloxane:

Remarks : No data available

STOT - repeated exposure

Components:

Polyether modified Trisiloxane:

Remarks : No data available

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Repeated dose toxicity

Components:

Polyether modified Trisiloxane:

Species : Rat
: 200 mg/kg
Application Route : Oral
Method : OECD 407
Remarks : literature

11.2 Information on other hazards

Further information

Product:

Remarks : No toxicological tests are available on the product.

SECTION 12: Ecological information

12.1 Toxicity

Product:

Ecotoxicology Assessment

Acute aquatic toxicity : Based on available data, the classification criteria are not met.

Chronic aquatic toxicity : Based on available data, the classification criteria are not met.

Components:

Polyether modified Trisiloxane:

Toxicity to fish : LC50 (Oncorhynchus mykiss): 2,1 mg/l
Exposure time: 96 h
Remarks: The data are derived from the evaluations or test results achieved with similar products (conclusion by analogy).
literature

Toxicity to daphnia and other : EC50 (Daphnia magna): 34,9 mg/l
aquatic invertebrates : Exposure time: 48 h
Remarks: literature

Toxicity to algae/aquatic : Remarks: no data available
plants

Ecotoxicology Assessment

Acute aquatic toxicity : Based on available data, the classification criteria are not met.

Chronic aquatic toxicity : Based on available data, the classification criteria are not met.

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12.2 Persistence and degradability

Components:

Polyether modified Trisiloxane:

Biodegradability : Test Type: aerobic
Result: Readily biodegradable
Biodegradation: > 60 %
Exposure time: 28 d
Method: OECD TG 301 F
Remarks: literature

12.3 Bioaccumulative potential

Components:

Polyether modified Trisiloxane:

Bioaccumulation : Remarks: no data available.

12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

Product:

Assessment : A PBT/vPvB evaluation is not available, since a chemical safety evaluation is not required / has not been carried out

12.6 Endocrine disrupting properties

no data available

12.7 Other adverse effects

Product:

Additional ecological information : Avoid release to the environment.
No further ecotoxicological data are available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : Must be brought to an adequate waste treatment facility, in conformity with applicable waste disposal regulations.

Contaminated packaging : Packaging, that can not be reused after cleaning must be disposed or recycled in accordance with all federal, national and local regulations.

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SECTION 14: Transport information

14.1 UN number or ID number

Not regulated as a dangerous good

14.2 UN proper shipping name

Not regulated as a dangerous good

14.3 Transport hazard class(es)

Not regulated as a dangerous good

14.4 Packing group

Remarks : Not classified as dangerous in the meaning of transport regulations.

ADR : Not regulated as a dangerous good

RID : Not regulated as a dangerous good

IMDG : Not regulated as a dangerous good

Remarks : Not classified as dangerous in the meaning of transport regulations.

IATA (Cargo) : Not regulated as a dangerous good

Remarks : Not classified as dangerous in the meaning of transport regulations.

IATA (Passenger) : Not regulated as a dangerous good

14.5 Environmental hazards

Not regulated as a dangerous good

14.6 Special precautions for user

Remarks : Not classified as dangerous in the meaning of transport regulations.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

15.2 Chemical safety assessment

No substance safety assessment is required for this product.

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SECTION 16: Other information

Full text of other abbreviations

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road; AIIIC - Australian Inventory of Industrial Chemicals; 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 substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECl - Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

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.

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