

Silcolapse® 411

Silicone Compound

November 2017

Description

Silcolapse® 411 is a silicone antifoam compound designed to treat aqueous or non-aqueous media in a wide variety of industries. Its low viscosity and effectiveness in alkaline conditions are of particular interest in a number of applications.

Silcolapse® 411 is intended for industrial use only and should not be used in the manufacturing or processing of food, cosmetics or pharmaceuticals

Examples of applications

- Chemicals - distillation, extraction, evaporation and filtration processes
- Oil & Gas - alkanolamine washing of natural or refinery gases.
- Metallurgy - additive for soluble oils
- Household Maintenance – manufacturing of waxes and polishes
- Public works - Asphalt packaging and transportation

Features

- Highly effective antifoam in aqueous and non-aqueous processes
- Effective at low doses, between 1 and 100 ppm
- Effective over a wide pH range, including alkaline conditions
- Easy to use, either as is or pre-diluted in a solvent or some of the medium to be defoamed
- Low viscosity enables use with automatic injection systems.
- Chemically inert to the media being de-foamed, will not adversely affect processing properties

Typical properties

Typical Properties – as supplied

- | | |
|--------------------------|--|
| • Appearance | grayish white opalescent liquid |
| • Active ingredients,% | 100 |
| • Specific Gravity, 25°C | 1.0 |
| • Diluents | aromatic, aliphatic or chlorinated, hydrocarbons, water-soluble solvents |

Please note: The typical properties listed in this bulletin are not intended for use in preparing specifications for any particular application of **Silcolapse®** silicone materials. Please contact our Technical Service Department for assistance in writing specifications.

Regulatory Information

EPA Pesticide Chemical Regulations

The Ingredients in **Silcolapse® 411** are exempt from the requirement of a tolerance under EPA regulations:

- 40 CFR 180.910 for use on raw agricultural commodities after harvest and growing crops
- 40 CFR 180.930 for use on animals

Instructions for use

Silcolapse® 411 is normally used at a concentration of 1 to 100 ppm of the medium to be de-foamed. **Silcolapse® 411** can be used as supplied or preferably pre-diluted to a concentration of between 1% and 10% by slowly adding 99 to 90 parts of diluent to 1 to 10 parts of **Silcolapse® 411** respectively.

- To obtain an antifoam concentration of approximately 1 ppm use 1 part of the 1% pre-dilution in 10,000 parts of the medium to be de-foamed or 1 part of the 10% pre-dilution in 100,000 parts of the medium to be de-foamed.

- To obtain an antifoam concentration of approximately 100 ppm use 1 part of the 1% pre-dilution in 100 parts of the medium to be de-foamed or 1 part of the 10% pre-dilution in 1,000 parts of the medium to be de-foamed.

Silcolapse® 411

The following diluents are suggested:

For non-aqueous processes:

- Aromatic hydrocarbons (benzene, toluene, xylene, naphtha, etc.)
- Aliphatic hydrocarbons (hexane, heptane, white spirits)
- Chlorinated hydrocarbons (tri-chlorethylene, perchlorethylene, carbon tetrachloride)

For aqueous processes:

Water soluble or water dispersible diluents such as:

- Methyl-ethyl-ketone or methyl-isobutyl-ketone
- Ter-butanol, dodecanol-1 or ethyl-2 hexanol
- Ethyl ether or isopropyl ether

Do not use methanol, IPA, ethylene glycol, propylene glycol or glycerin as these solvents will not dissolve the silicone component of this antifoam compound.

The above stated concentrations are given as general guidelines, users should make their own tests to determine the optimum level required, which will vary depending on factors such as: the composition of the medium being de-foamed, the temperature and pH of the medium, and the amount of agitation available. Generally, a dosage of 10 ppm of **Silcolapse® 411** can be used initially, then increased or decreased based on de-foaming results.

Storage and shelf life	Silcolapse® 411 when stored in its original unopened packaging, at a temperature between -4°F(-20°C) and 122°F(50°C), has a shelf life of 18 months from its date of manufacturing. Beyond this date, Elkem Silicones no longer guarantees that the product meets the sales specifications.
Safety	Please read the container labels for Silcolapse® 411 or consult the Material Safety Data Sheet (MSDS) before handling for safe use, physical and health hazard information. The MSDS is not included with the product packaging, but can be obtained by contacting Elkem Silicones at 866-474-6342 or consult your Elkem Silicones representative.
Packaging	Silcolapse® 411 is available in 200 Kg. containers. Certificate of Analysis for each lot purchased is available on request.

Visit our website www.silicones.elkem.com

EUROPE

Elkem Silicones France
21 Avenue Georges Pompidou
F69486 Lyon Cedex 03
FRANCE
Tel. (33) 4 72 13 19 00
Fax (33) 4 72 13 19 88

NORTH AMERICA

Elkem Silicones USA
2 Tower Center Boulevard
Suite 1601
East Brunswick, NJ 08816-1100
United States
Tel. (1) 732 227-2060
Fax. (1) 732 249-7000

LATIN AMERICA

Elkem Silicones Brazil Ltda.
Av. Duquesa de Goiás, 716
2º andar
05680-002 Sao Paulo
Brazil
Tel. (55) 11 4380-6900

ASIA PACIFIC

Elkem Silicones Hong Kong
Trading Co. Ltd
29th Floor, 88 Hing Fat Street
Causeway Bay
Hong Kong
Tel. (852) 3106 8200
Fax (852) 2979 0241

Warning to the users

The information contained in this document is given in good faith based on our current knowledge. It is only an indication and is in no way binding, particularly as regards infringement of or prejudice to third party rights through the use of our products. ELKEM SILICONES guarantees that its products comply with its sales specifications. This information must on no account be used as a substitute for necessary prior tests which alone can ensure that a product is suitable for given use. Determination of the suitability of product for the uses and applications contemplated by users and others shall be the sole responsibility of users. Users are responsible for ensuring compliance with local legislation and for obtaining the necessary certifications and authorisations. Users are requested to check that they are in possession of the latest version of this document and ELKEM SILICONES is at their disposal to supply any additional information.