

SILICO®

Silicone Defoamer for Water-Based Formulations



SILICO® is a silicone-based defoamer intended to control micro- and macro-foam and improve the physical consistency and appearance of water-based formulations. It is also used to reduce unwanted air in lignosulfonate- and naphthalene-based admixtures.

Applications

- Water-based paints and inks
- Pigment and filler dispersions
- Lignosulfonate-based concrete admixtures
- Naphthalene-based concrete admixtures
- Other water-based formulations after compatibility testing

Product Role

SILICO is used as a processing aid. It does not replace formulation design, air-content testing or application-performance validation.

Advantages / Benefits

- Strong action against micro- and macro-foam
- Supports uniform surface appearance in water-based systems
- Helps manage unwanted air in lignosulfonate and naphthalene admixtures
- Supports formulation consistency and process control
- Useful with pigment- and filler-containing systems after trials

Guideline for Use

Add about half of the selected quantity before the resin, binder or concrete-admixture component. Add the remainder after those materials are incorporated, with the mixer at low speed. Confirm density, viscosity, surface appearance and performance.

Dosage

Recommended range: 0.10-0.30% by weight of the total formulation. Start at the lower end and increase only as required by testing.

Compatibility

Water content, resin or binder type, pigment, filler, surfactant and mixing energy can change defoaming efficiency. Test every formulation and significant raw-material change before production.

Trial Requirements

- Foam knock-down and long-term foam control
- Density, viscosity and storage stability
- Surface appearance, cratering and application quality
- Air content and concrete performance for admixture use

Effect of Overdosing

Excess or an unsuitable silicone defoamer may adversely affect density, surface appearance, coating defects or application performance. Reduce dosage and repeat compatibility trials.

Limitations

Do not assume compatibility across different binders or admixture chemistries. No pH, density, solids or flash-point value is specified in this TDS; use the current commercial documentation.

Product Information

Chemical Type	Silicone-based defoamer formulation
Primary Use	Foam control in compatible water-based formulations
Packaging	20 kg plastic jerrycan
Shelf Life	At least 24 months in unopened original packaging
Storage Condition	Closed container; protect from cold, frost and direct sunlight
Recommended Dosage	0.10-0.30% by weight of total formulation
Appearance / pH / Density	Refer to the current commercial specification and batch CoA
Compatibility	Confirm for each resin, binder, pigment, filler or admixture system

Storage

Store in the original closed container and protect from direct exposure to cold conditions and frost. Before use, inspect for separation or loss of homogeneity. Consult ALPAKA Technical Service if the product condition has changed.

Basis of Data

Technical information in this sheet is based on ALPAKA product information and general industry references. Values described as approximate are not release specifications. Actual performance may vary with raw materials, formulation, temperature, process and site conditions. Verify critical properties on the current batch documentation.

Precautions

Obtain and follow the current product-specific SDS. Avoid ingestion and eye or skin contact. Use suitable gloves, eye protection and ventilation. Rinse accidental contact with plenty of clean water and seek medical advice if symptoms persist.

Fire / Cleaning and Disposal

Fire classification is not established in this TDS; refer to the current SDS. Use an extinguishing medium suitable for the surrounding fire. Clean spills with a compatible inert absorbent, prevent entry to drains and dispose of waste under local requirements.

Additional Information

For current specifications, application support and trial guidance, contact ALPAKA Chemical Group:
info@alpakagroup.com | +98 933 202 3003 |
www.alpakagroup.com.

Important Notes

The information and recommendations in this Product Data Sheet are given in good faith and reflect ALPAKA's current knowledge of the product when correctly stored, handled and used under normal conditions. Materials, formulations, substrates, production methods and site conditions vary; therefore no warranty of merchantability or fitness for a particular purpose can be inferred from this document. The user is responsible for confirming suitability through representative trials and for complying with applicable laws, standards, approvals and third-party rights. The current commercial specification, batch Certificate of Analysis and product-specific Safety Data Sheet take precedence over this document. Refer to the most recent issue for the product concerned.