

Technical Information

SURFYNOL® DF-37 Defoamer

Organic Oil Defoamer

Description

Surfynol® DF-37 defoamer is a versatile, oil-based defoamer that is an effective foam-control agent in latex dipping processes as well as coating and ink formulations, among other industrial applications. Because of its wetting capabilities, the tendency for Surfynol® DF-37 defoamer to cause fisheyes, craters, retraction and other surface defects is significantly reduced compared to most defoamers.

This organic defoamer also provides inherent wetting properties. As a result, Surfynol® DF-37 defoamer allows for dewebbing and consistent coverage of ceramic and synthetic forms used in latex dipping. Competitive dewebbing agents are usually water-based silicone emulsions, which can separate either upon standing or after freezing. This results in poor dewebbing performance and increases the potential for fisheyes and other defects, even after mixing. Surfynol® DF-37 defoamer also promotes wetting of other low-energy substrates like plastics and contaminated or improperly cleaned surfaces.

Recommended Usage

Use between 0.1 and 0.5% of total formulation weight in coatings. Use between 0.05 and 0.3% of total formulation weight for dewebbing. Add on a wet basis, then mix under moderate shear for 15–30 minutes.

Advantages

- Excellent defoaming
- Inherent surfactant properties to improve wet-out of improperly cleaned forms and low energy substrates
- Excellent latex compatibility
- Superior dewebbing, even at low concentrations
- Good freeze-thaw stability
- Compliant under certain FDA regulations

Typical properties

Appearance	Hazy, to yellow amber liquid
Specific Gravity at 20 °C	0.97–0.98
Viscosity at 20 °C	356 mPa.s
Flash Point	>109 °C
Pour Point	3 °C
Activity	100%
VOC (US EPA Method 24)*	0

* Volatile organic compounds, VOCs, as defined by the EPA in 40 CFR 51.100(s). Surfynol® DF-37 defoamer was found to contribute no VOC under EPA Method 24 testing conditions when evaluated at 0.5 wt.% in a zero-VOC coating formulation.

These are typical properties only and do not represent sales or manufacturing specifications.

Applications

- Latex dipping
- Water-based coatings and inks
- Adhesives
- Concrete and drymix mortars
- Metalworking fluids
- Paper coatings

Storage and Handling

Surfynol® DF-37 defoamer should be stored under dry and clean conditions between –10 °C and 50 °C.

Product is freeze-thaw stable; if it phase separates or freezes at colder temperatures, warm container to 20–30 °C and mix thoroughly before use. Please refer to Material Safety Data Sheet.

Shelf-Life

12 months from the date of manufacture.

Hazardous goods classification

Information concerning

- classification and labelling according to regulations for transport and for dangerous substances
- protective measures for storage and handling
- measures in case of accidents and fire
- toxicity and ecological effects

is given in our material safety data sheets.

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