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ISO 9001:2015 · ISO 14001:2015 · ISO 22000:2018

Technical Data Sheet

ZEELCHEM™ NDF — Non-Silicone Defoamer

TECHNICAL DATA SHEET

DOCUMENT NO.	REVISION	ISSUE DATE	PRODUCT TYPE
ZP/TDS/NDF/01	01	12-11-2026	Silicone-free defoamer emulsion

APPEARANCE	IONIC NATURE	PH (AS SUCH, 25 °C)
Thick, milky white liquid emulsion	Non-ionic	6.0 – 8.5

SPECIFIC GRAVITY (25 °C)	VISCOSITY (BROOKFIELD, 25 °C)	NON-VOLATILE MATTER (105 °C)
0.95 – 1.02	1,000 – 3,000 cP	25 – 30 %

1 Product description

ZEELCHEM™ NDF is a silicone-free defoamer based on EO/PO polyether and fatty alcohol chemistry, supplied as a thick, milky white liquid emulsion. It controls macro-foam and entrained air without the craters, fish-eyes or recoat problems associated with silicone, and is suited to coatings, paper, adhesives, construction chemicals and silicone-sensitive processes.

Product type: Silicone-free defoamer emulsion (polyether / fatty alcohol based) · **Brand:** ZEELCHEM™ · **Manufacturer:** ZEEL PRODUCT, Vadodara, India

2 Typical properties

Property	Typical value
Appearance	Thick, milky white liquid emulsion
Chemical nature	Silicone-free: EO/PO polyether + fatty alcohol emulsion
Silicone content	Nil
Ionic nature	Non-ionic
pH (as such, 25 °C)	6.0 – 8.5
Specific gravity (25 °C)	0.95 – 1.02
Viscosity (Brookfield, 25 °C)	1,000 – 3,000 cP
Non-volatile matter (105 °C)	25 – 30 %
Solubility	Dispersible in water

Flash point	Not applicable (water based)

Typical values, not a specification. Refer to the batch Certificate of Analysis.

3 Features & benefits

- 100 % silicone-free — no craters, fish-eyes or recoat issues
- Good knockdown and air release
- Polyether component active above cloud point — ideal for warm processes
- Non-ionic, wide compatibility
- Easy to handle, water-dispersible

4 Applications

- Water-based paints, primers, putty and coatings
- Paper & pulp — wet end, size press, coating
- Adhesives, printing inks and polymer emulsions
- Construction chemicals — admixtures, waterproofing
- Fermentation and warm process liquors
- Effluent treatment where silicone is not desired

5 Recommended starting dosage

Application	Starting dosage
Water-based paints & coatings	0.1 – 0.5 % on total formula
Paper machine wet end	Low ppm on stock, on demand
Adhesives & emulsions	0.05 – 0.3 %
Construction chemicals	0.05 – 0.5 %

Optimum dosage depends on the system and should be established by trial. Start at the lower level and increase until foam is controlled.

6 Method of application

- Stir or roll the container gently before use.
- Use as supplied, or pre-dilute by adding the product slowly to clean cold / room-temperature water under stirring (typically 1:5 to 1:20). Use dilutions within 24 hours.
- Dose continuously at, or just before, the point of foam generation using a metering pump, spray nozzle or batch addition.

7 Packing

50 kg HDPE carboy · 200 kg HDPE drum · 1,000 kg IBC (on request).

8 Storage & shelf life

Store in tightly closed original containers in a cool, shaded place between 5 °C and 35 °C. Protect from frost and direct sunlight. Shelf life: 12 months from date of manufacture in unopened packs. Stir before use.

9 Handling & safety

Wear gloves and safety goggles. Spills make floors slippery — absorb with inert material and clean promptly. Refer to the Safety Data Sheet (SDS) before use.

The information in this data sheet is based on our present knowledge and is given in good faith for reference. It does not constitute a warranty or specification. Users should test the product to establish suitability for their own process. ZEELCHEM™ is a brand of ZEEL PRODUCT.

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