

Technical Information

Carbowet® 103

Product description

Carbowet® 103 is an optimized low-foaming, nonionic surfactant that has been designed to be an effective alternative to alkylphenol ethoxylate surfactants (APEs) containing approximately four moles of ethylene oxide (with HLB values of ~8–9). It is a 100% active, low viscosity liquid that can provide rapid pigment and substrate wetting and offers benefits in a wide range of applications. Additionally, Carbowet® 103 surfactant is easy to use and to incorporate.

Physical properties

Appearance	Clear, colorless to pale yellow liquid
Active matter	100 %
Viscosity (23 °C)	Approx. 21 mPas
Density (25 °C)	0.93 g/cm ³
Flash Point (°C)	124
Pour Point (°C)	-10

Application

Carbowet® 103 is a liquid dispersing additive used for the surface treatment of pigments to improve dispersion properties of:

- organic pigments
- inorganic fillers e. g. talc
- inorganic pigments e. g. titanium dioxide, ultramarine blue, iron oxides

Carbowet® 103 improves dispersion properties of fillers in adhesive formulations based on silane-modified polymers.

Usage in water-based adhesive systems is also possible.

Properties/Benefits

- Good surface tension reduction
- Low-viscosity, easy-to-handle liquid
- Good compatibility with adhesive formulations based on silane-modified polymers
- Rapidly soluble in water—not prone to gel formation
- Contains no added solvent or APEs

Dosage and handling

Carbowet® 103 can be applied directly to adhesive formulations usually before adding the filler or pigment.

The required dosage level depends on the nature of the particles and on the composition of the polymeric formulation. For use in the adhesive formulations we recommend an initial dosage between 0.1 to 3.0 % of total formulation weight. Optimum dosage should be evaluated in suitable tests prior to the final application.

Registration status

EINECS/ELINCS, TSCA, DSL, AICS, ENCS, TCCL, PICCS, IECSC, New Zealand

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Evonik Nutrition & Care GmbH
 Goldschmidtstraße 100
 45127 Essen, Germany
 Phone Europe +49 201 173 2665
 Phone Asia +86 21 61191 125
 Phone Americas +1 804 727 0700
www.evonik.com/interface-performance

Storage stability

The shelf life for Carbowet® 103 is 24 months from the date of manufacture (stored in original sealed containers at room temperature). Product is freeze-thaw stable; if it phase separates or freezes at colder temperatures, warm container to 40°C and mix thoroughly before use.

Packaging

191 kg steel drum

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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