

Product Specification

CARBOWET® 109 Surfactant – Non-Ionic Surfactant**Description**

CARBOWET® 109 surfactant is an optimized non-ionic surfactant that has been designed to be an effective alternative to alkylphenol ethoxylate surfactants (APEs) containing approximately 8–9 moles of ethylene oxide (with HLB values of ~13). It is a 100% active, low viscosity liquid that provides rapid pigment and substrate wetting and offers benefits in a wide range of applications. Additionally, CARBOWET® 109 surfactant is easy to use and incorporate.

Benefits

- 100% active, low-viscosity, easy-to-handle liquid
- Cost-effective surface tension reduction
- Rapidly soluble in water—not prone to gel formation
- Contains no added solvent or APEs
- Adds no VOCs per US2 regulations
- Has several food contact compliances
- Listed on CleanGredients™

Applications

- Architectural coatings
- Industrial coatings
- Adhesives
- Pigment synthesis and dispersion
- Inks

Recommended usage

Between 0.1 and 3.0% of total formulation weight.

Storage and handling

Keep away from direct sunlight. Overheating of an ethoxylate stored under air should be avoided. When an ethoxylate is vigorously mixed in the presence of air or oxygen at temperatures > 125 °F (> 50 °C), it can degrade product quality. Storage under an inert atmosphere is recommended.

Keep containers tightly closed in a dry, cool and well-ventilated place. Product is freeze-thaw stable; if it phase separates or freezes at colder temperatures, warm container to 40 °C and mix thoroughly before use.

Shelf life

The shelf life for this product is 24 months from the date of manufacture.

Table 1: Typical Properties¹

| | |
|-------------------------------------|--|
| Appearance | clear, colorless to pale yellow liquid |
| Viscosity @ 25 °C (mPa · s) | 60 |
| Specific Gravity @ 25 °C | 0.98 |
| Flash Point (°C) | 159 |
| Pout Point (°C) | 8 |
| VOC (US EPA Method 24) ² | 0 |

- 1 These are typical properties only and do not represent sales or manufacturing specifications.
- 2 VOCs, as defined by the EPA in 40 CFR 51.100(s). AIRASE® 4500 defoamer was found to contribute no VOC under EPA Method 24 testing conditions when evaluated at 1.0 wt.% in a zero-VOC coating formulation.

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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