

# ALFONIC 1216CO-3 Ethoxylate



SASOL

## Technical Data Sheet

### Description

Sasol Chemicals ALFONIC 1216CO-3 Ethoxylate is a biodegradable nonionic based on a linear primary alcohol formulated to simulate that derived from coconut oil. It is liquid at room temperature, essentially 100% active and has the following structural formula:  $\text{CH}_3(\text{CH}_2)_x(\text{OCH}_2\text{CH}_2)_3\text{OH}$  where 'x' varies between 11 and 15. The narrow range version of this ethoxylate made using Sasol Chemicals patented NOVEL catalyst technology is also available.

### Applications

- Detergents
- Personal care
- Household and industrial cleaning
- Agricultural adjuvants
- Pulp and paper processing
- Anionic surfactant feedstock

### Properties

Typical physical properties are listed in the table to the right. Actual properties will vary slightly from lot to lot.

### Contact information

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### Don't see what you are looking for?

Sasol Chemicals offers a wide range of alcohols and surfactants. Please contact us for information about creating your own personalized product.

Typical properties	ALFONIC 1216CO-3
Avg. molecular weight, g/mol	330
Avg. EO content, wt. %	40
Free EO, ppm	1 max.
1,4-Dioxane, ppm	1 max.
Hydroxyl number, mg KOH/g	165 - 175
Water, wt. %	0.1 max.
Glycol, wt. %	1 max.
Free alcohol, wt. %	15 max.
Density, g/mL @ 40°C / 104°F	0.908
Flash point, °C (°F)	>175 (347)
Cloud point, 10% in BDG, °C (°F)	62 (144)
Pour point, °C (°F)	5 (41)
Viscosity, cSt @ 40°C / 104°F	15.7
pH, 5% in IPA/water	5 – 8
Color, APHA, mg Pt/L	50 max.
HLB, calculated	8.0
Wettability on cotton, seconds	580
Critical Micelle Concentration, mg/L	79.35
SFT, mN/m	24.38
Avg. Contact Angle on PTFE	47.27
Solubility in water, 2 wt. %	Insoluble

*\*Mix samples well before use.*

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## Storage and handling

Small quantities should be stored in sealed bottles, totes and drums at a temperature of 25°C (77°F) or less. Liquid bulk quantities should be padded with a dry inert gas, such as nitrogen, to prevent air from entering the tank or container. The product should not be exposed to temperatures in excess of 60°C (140°F) for long periods of time to avoid product degradation.

Based on our experience, ALFONIC 1216CO-3 Ethoxylate shows no physical and/or chemical changes for at least 24 months after the manufacturing date when stored under conditions that minimize exposure to air, moisture and extreme temperatures. It is recommended to test the ethoxylate for key specifications every 24 months after the manufacturing date. Please be advised that Sasol Chemicals will not be responsible for retesting the product.

The preceding data is based on tests and experience, which Sasol Chemicals believes reliable, and is supplied for informational purposes only. Sasol Chemicals expressly disclaims any liability whatsoever for damage or injury which results from the use of the preceding data and nothing contained therein shall constitute a guarantee, warranty, or representation (including freedom from patent liability) by Sasol Chemicals with respect to the data, the product described, or its fitness for use for any specific purpose, even if that purpose is known to Sasol Chemicals. For detailed safety and handling information regarding these products, please refer to the respective Sasol Chemicals Safety Data Sheet. 06/08/2022

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