



PureClean

Aromatic Amine Oxide Surfactants

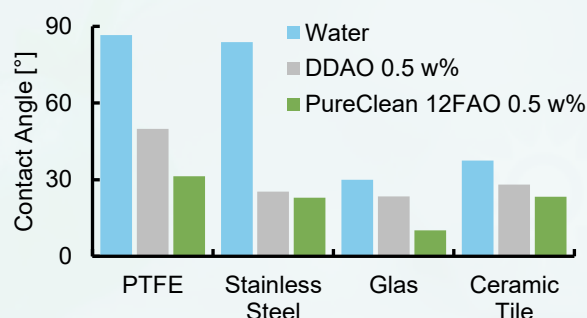
We are pleased to present two unique market ready bio-based aromatic amine oxide surfactants:

- PureClean 10FAO
- PureClean 12FAO

The products demonstrate & exceed typical wetting, foaming and surfactant properties of conventional amine oxides.

By choosing local and bio-based feedstocks PureClean surfactants are made from $\geq 95\%$ renewable and EU-based feedstocks. Available for shipment as solid and aqueous solutions.

POTENTIAL FOR USE IN HOME CARE, PERSONAL CARE, AGRO-CHEMICALS, TEXTILES & LEATHER



REPRESENTATIVE PRODUCT PROPERTIES

	PureClean 10FAO	PureClean 12FAO
Appearance (as solid)	White powder	White powder
%Active (as solid)	>99	>99
HLB (Davies)	22.05	21.10
Krafft / Cloud point	None	None
Surface tension (1 wt%) ¹	33.1 / 33.8	30.9 / 31.4
CMC ²	479.3 / 208.5	80.7 / 21.6
Rel. Diffusion coefficient ³	0.2% / 85%	31% / 7.6x
Foaming profile	High & very stable	High & very stable
Rel. Acute Toxicity (<i>A. fischeri</i>) ⁴	2.4%	10.5%
Readily biodegradable	Yes ⁵	Yes ⁶

1. [mN/m]; pH 2 / pH 12

2. [ppm]; pH 2 / pH 12

3. relative to DDAO pH 2 / pH 12

4. ISO 11348-3:2007; relative to DDAO

5. OECD 301B

6. OECD 301F

Let's collaborate. Whether you're a surfactant manufacturer or a brand owner seeking sustainable, high-performance solutions, we want to partner with you.

