

## **Product Specification**

# **Anti Bacterial Additive 1kg**

**Description:** Quaternary ammonium compounds, benzyl (C12-C16) alkyl dimethyl,

chlorides

**CAS number:** 68424-85-1 **EC number:** 270-325-2

Test parameter	Unit	Specification
Appearance		White to pale straw clear liquid
pH value		6.0 – 8.0
Cationic Activity	%	49.0 – 51.0
Amine value	mg KOH/g	Max. 1.0
Specific Gravity at 20°C		0.96 – 1.0

### **Additional information**

Average Molecular Weight	354
Viscosity (dynamic at 20°C)	~300 mPa.s

Primesurf BAC50 Antimicrobials all contain the active substance C12-C16 Alkyl dimethyl benzyl ammonium chloride (ADBAC). The active is a cationic molecule offering good surfactant properties and can be formulated together with nonionic and/or amphoteric surfactants.

ADBAC has a broad antimicrobial efficacy against gram-positive and gram-negative bacteria, yeast, and enveloped viruses. ADBAC maintains its efficacy across a broad pH range. Single-active C12-C16 ADBAC products are available at different active concentrations, C-chain distributions and solvent combinations.

#### **Antimicrobial Efficacy**

Food, Industrial and Institutional Areas
Aqueous dilutions tested According European Norms (EN)

### **Bactericidal Activity, Quantitative Suspension Test**

Test method	Test Organisms	Contact time	Test Conditions	Log Reduction Required	C12-C16 ADBAC Pass level (ppm)
EN 1276	Pseudomonas aeruginosa, Staphylococcus aureus	5 minutes	0.3 g/l Albumin (clean conditions)	≥ 5.0	1750
EN 1276	Pseudomonas aeruginosa, Staphylococcus aureus	5 minutes	3.0 g/l Albumin (dirty conditions)	≥ 5.0	2000

## Yeasticidal Activity, Quantitative Suspension Test

Test method	Test Organisms	Contact time	Test Conditions	Log Reduction Required	C12-C16 ADBAC Pass level (ppm)
EN 1650	Candida albicans	15 minutes	0.3 g/l Albumin (clean conditions)	≥ 4.0	100
EN 1650	Candida albicans	15 minutes	3.0 g/l Albumin (dirty conditions)	≥ 4.0	250

### Viricidal Activity, Quantitative Suspension Test

Test method	Test Organisms	Contact time	Test Conditions	Log Reduction Required	C12-C16 ADBAC Pass level (ppm)
EN 14476	Vaccinia virus Ankara (MVA)	5 minutes	0.3 g/l Albumin (clean conditions)	≥ 4.0	250

### **Overview of Primesurf BAC50 Antimicrobials**

Average active content	Typical C-chain distribution	Average content of organic	Average content of water
content		solvent	or water
50% C12-C16	C10 ≤1%, C12 65-75%, C14 22-	-	50% water
ADBAC	32%, C16 ≤1%		

#### Disclaimer

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