Antimicrobial Efficacy

Activity Spectrum

Test Method	Test Organisms	Test Conditions	Log Reduction Required	Lonzabac™ 12.100	Lonzabac™ 12.30
Bactericidal Activity, Quantitative Suspension Test					
EN 1276	*Pseudomonas aeruginosa*, *Escherichia coli*, *Staphylococus aureus*, *Enterococcus hirae*	– 3.0 g/l Albumin – 5 minutes contact time (under dirty conditions)	> 5.0	0.500 %,	–
EN 1276	*Pseudomonas aeruginosa*, *Escherichia coli*, *Staphylococus aureus*, *Enterococcus hirae*	– 0.3 g/l Albumin – 5 minutes contact time (under clean conditions)	> 5.0	0.025 %,	–
Bactericidal* Activity, on Surfaces					
EN 13697	*Pseudomonas aeruginosa*, *Escherichia coli*, *Staphylococus aureus*, *Enterococcus hirae*	– 3.0 g/l Albumin – 5 minutes contact time (under dirty conditions)	> 4.0	0.050 %,	–
Algaecidal Activity					
Internal Lonza method	*Chlorella vulgaris*	–	–	20 ppm	–

Veterinary Specific Tests

Test Method	Test Organisms	Test Conditions	Log Reduction Required	Lonzabac™ 12.100	Lonzabac™ 12.30
EN 1656	*Enterrococcus hirae, Proteus vulgaris, Pseudomonas aeruginosa, Staphylococcus aureus*	– 10 g/l Albumin + 10 g/l Yeast extract – 5 minutes contact time (under dirty conditions) – 10 °C	> 5.0	0.250 %,	–
EN 14204:2004*	*Mycobacterium avium*	– 3.0 g/l Albumin – 60 minutes contact time – 10 °C	> 4.0	–	1.000 %
	Mycobacterium avium	– 3.0 g/l Albumin – 60 minutes contact time – 20 °C	> 4.0	–	1.000 %

High efficiency at low temperatures and high soiling levels.

Tuberculocidal Efficacy

Test Method	Test Organisms	Test Conditions	Log Reduction Required	Lonzabac™ 12.100	Lonzabac™ 12.30
EN 14348:2005*	*Mycobacterium avium*	– 3 g/l Albumin + 3 ml/l Sheep erythrocytes – 15 minutes contact time (under dirty conditions) – 20 °C	> 4.0	1.000 %	–
	Mycobacterium avium	– 3 g/l Albumin + 3 ml/l Sheep erythrocytes – 60 minutes contact time (under dirty conditions) – 20 °C	> 4.0	0.500 %	–

High tuberculocidal efficacy under high organic load.

*Certificate Dr. Brill & Partner GmbH (2007)

Virucidal Efficacy

Test Method	Test Organisms	Test Conditions	Lonzabac™ 12.100	Lonzabac™ 12.30
HBs Antigen Inactivation Test				
Internal Lonza method	Hepatitis B Virus (HBV)	– High organic load: 2 % Albumin or Fetal Calf Serum – 30 minutes contact time	0.030 %	–

Based on the excellent HBV inactivation capacity of Lonzabac™ 12 Antimicrobial, an even better efficacy of the disinfectant can be expected under the same conditions against the less stable HIV.

Typical Physical Properties

Average Values	Lonzabac™ 12.100 Antimicrobial	Lonzabac™ 12.30 Antimicrobial
Odour	Slight smell of ammonia	Slight smell of ammonia
Density	0.870 g/ml	0.967 g/ml
Viscosity (Brookfield, sp.1, 10 rpm, 23 °C)	38 mPa · s	200 mPa · s
Average molecular weight	299	299
Surface tension (1 % aqueous solution)	32 mN/m	32 mN/m
Freeze thaw stability	Good	Good
Solubility	Soluble in water and polar organic solvents	Soluble in water and polar organic solvents
Compatibility	Compatible with nonionic, cationic and some anionic surfactants. Not compatible with aldehydes!	Compatible with some nonionic, cationic and anionic surfactants. Not compatible with aldehydes!
Setting point	< 10 °C	< 5 °C
pH (concentrate)	–	*ca.* 11.9
pH 1 % aqueous solution	10–12	10–12
Product shelf life	2 years	2 years

Packaging

Lonzabac™ 12.100 Antimicrobial	Lonzabac™ 12.30 Antimicrobial
– 160 kg net weight PE drum – 800 kg net weight IBC	– 180 kg net weight PE drum – 890 kg net weight IBC – Bulk