

Triameen® Y12D-30

Guideline formulation with GLDA for surface disinfection

We are a leading producer of fatty amine based products. Triameen® Y12D-30 represents a highly effective biocidal amine with broad spectrum microbiological properties. It is an aqueous dilution containing about 30% of N-(3-aminopropyl)-N-dodecylpropane-1,3- diamine (as "diamine", CAS 2372-82-9 in the review program of the Biocidal Product Regulation for disinfectant product types 2, 3, 4). It does not have an ionic charge like the quaternary ammonium compounds.

We also produce a wide array of chelating agents. Chelating agents are known to boost the efficacy of biocidal formulations by extracting metal ions from cell membranes of microorganisms, making them more vulnerable for biocidal attack. One of the best chelates to use for this purpose is GLDA (CAS 51981-21-6), a chelating agent with superior environmental and (eco)toxicological properties and sold under the name Dissolvine® GL-47-S.

This guideline formulation combines the outstanding properties of both products:

10% Triameen® Y12D-30
8% Dissolvine® GL-47-S
82% water

Specifically suitable for disinfection of food contact surfaces

- Usual concentrations are safe regarding indirect food contact
- On the "French positive list"
- No MRL (Maximum Residue Limit)

The formulation is highly effective versus different types of microorganisms, proven in appropriate EN standard tests

EN 14476 (Suspension test for virucidal efficacy)

Test strain: MVA (modified vaccinia virus Ankara, obligatory test organism to prove efficacy versus enveloped viruses);
Clean conditions: (0.3 g/l Albumin):

Test passed at 2.5% in 5 minutes

Test strain BCoV (bovine coronavirus, regarded as surrogate of members of coronaviridae family including MERS-CoV, SARS-CoV-1 and SARS-CoV-2);

Clean conditions (0.3 g/l Albumin):

Test passed at 1.25% in 5 minutes

Test strains: adenovirus and murine norovirus, obligatory test organisms to prove limited spectrum virucidal activity;

Clean conditions (0.3 g/l Albumin):

Test passed at 12% in 60 minutes

EN 13697 (Surface test for bactericidal efficacy)

Test strains: Escherichia coli, Staphylococcus aureus, Enterococcus hirae, Pseudomonas aeruginosa;

Clean conditions: 0.3 g/l Albumin for all:

Test passed at 1.5% in 5 minutes

Clean conditions 8.5 g/l Skim milk for Pseudomonas aeruginosa:

Test passed at 2.0% in 5 minutes

EN 13697 (Surface test for yeasticidal efficacy)

Test strains: Candida albicans;

Clean conditions: 0.3 g/l Albumin:

Test passed at 1.5% in 5 minutes

EN 1276 (Suspension test for bactericidal efficacy)

Test strains: Escherichia coli, Staphylococcus aureus, Enterococcus hirae, Pseudomonas aeruginosa;

Clean conditions (0.3 g/l Albumin):

Test passed at 0.4% in 5 minutes

EN 1650 (Suspension test for yeasticidal efficacy)

Test strain: Candida albicans;

Clean conditions (0.3 g/l Albumin):

Test passed at 0.3% in 15 minutes

Phys-chem properties	As such	2% dilution*	1.3% dilution*	0.5% dilution*
Appearance at 20°C	clear liquid	clear liquid	clear liquid	clear liquid
Cloud point	55°C	>75°C	>75°C	>75°C
Density	1.02 g/cm	1.00 g/cm	1.00 g/cm	1.00 g/cm
pH	12.0	10.1	9.9	9.4
Foam height**				
immediately		157 mm	140 mm	128 mm
after 1 min		152 mm	138 mm	125 mm
after 5 min		145 mm	136 mm	121 mm
Surface Tension (Du Noüy)	31.0 mN/m	30.5 mN/m	30.6 mN/m	30.2 mN/m
CMC	17 mg/l			

* Dilution is done in water 17° German Hardness (17°dH) = 300 mg/l as CaCO₃

** Foam height was measured in Vindan at 20°C

Contact us directly for detailed product information and sample request
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Nouryon

Nouryon is a global, specialty chemicals leader. Markets and consumers worldwide rely on our essential solutions to manufacture everyday products, such as personal care, cleaning goods, paints and coatings, agriculture and food, pharmaceuticals, and building products. Furthermore, the dedication of more than 7,900 employees with a shared commitment to our customers, business growth, safety, sustainability and innovation has resulted in a consistently strong financial performance. We operate in over 80 countries around the world with a portfolio of industry-leading brands. Visit our website and follow us @Nouryon and on LinkedIn.

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