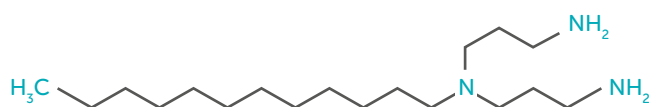


Triameen® Y12D antimicrobial

Highly effective biocidal amine with broad spectrum microbiocidal properties

As a leading producer of fatty amine-based products, we are a back-integrated manufacturer and offer a highly experienced technical and regulatory expert team, providing quick, high-value service and advice.

Triameen® Y12D antimicrobial molecule



Bis (3-aminopropyl) dodecylamine (CAS 2372-82-9)

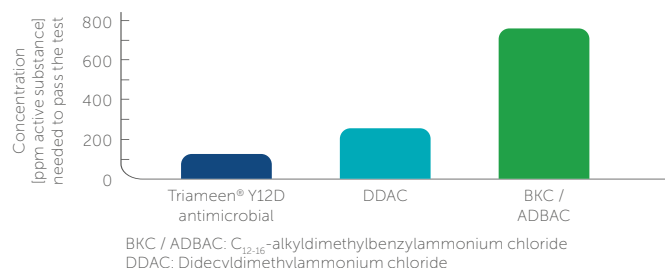
Triameen® Y12D antimicrobial is highly effective

Against mycobacteria

Results EN 14348 (0,03% BSA (Bovine Serum Albumin)), contact time 60 minutes:
Mycobactericidal and Tuberculocidal at 600 ppm active substance

Against Pseudomonas aeruginosa compared to quaternary ammonium compounds (quats)

Results EN 1276 (0,03% BSA), contact time 5 minutes:



Against enveloped viruses like influenza virus H1N1

Results EN 14476 (0,03% BSA), contact time 10 minutes:
Effective at 300 ppm active substance

Properties

- Broad spectrum antimicrobial performance
- Free of aldehydes and halogens
- Not a sensitizer
- Not a quat → better compatible with anionic formulations
- Not solvent based, non-flammable
- Non-corrosive to metal
- Readily biodegradable
- High biobased content – 67% RCI
- High activity ingredient – 88-94% as sold
- Low-color
- Low-odor
- Liquid at room temperature

Regulatory situation

Europe

- Biocidal Product Regulation (BPR) :
Supported in EU and Great Britain for following Product Types (PT):
 - Disinfection use (PT 2, 3, 4)
 - Preservative use (PT 6, 11, 12, 13)
- Further information for use as preservative:
Triameen® Y12D antimicrobial is on BfR (German Federal Institute for Risk Assessment) recommendations on Food Contact Materials
 - XIV: Polymer dispersions for coating commodities
 - XXXVI: Paper and board

USA

- EPA reg no 34688-85:
Manufacturing Use Product (MUP) for use in formulating end-use antimicrobial products for use on hard, non-porous non food contact surfaces
- US registrations granted in all states

Contact us directly for detailed product information and sample request
website | nouryon.com/markets/cleaning
email | cleaning@nouryon.com

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.

All information concerning our products and/or all suggestions for handling and use contained herein (including formulation and toxicity information) are offered in good faith and are believed to be reliable. However, Nouryon makes no warranty express or implied (i) as to the accuracy or sufficiency of such information and/or suggestions, (ii) as to any product's merchantability or fitness for a particular use or (iii) that any suggested use (including use in any formulation) will not infringe any patent. Nothing contained herein shall be construed as granting or extending any license under any patent. The user must determine for itself by preliminary tests or otherwise the suitability of any product and of any information contained herein (including but not limited to formulation and toxicity information) for the user's purpose. The safety of any formulations described herein has not been established. The suitability and safety of a formulation should be confirmed in all respects by the user prior to use. The information contained herein supersedes all previously issued bulletins on the subject matter covered.

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