

# Hygiene Product Catalogue



- Hygiene Overview
- Biocidal Actives
- Preservatives
- Surfactants
- Others
- Medical Device Formulations
- Lonzagard® Formulations

# Content

Hygiene Overview	3
Biocidal Actives	4
Preservatives	6
Surfactants	8
Others	8
Medical Device Formulations	8
Lonzagard™ Formulations	10





## Hygiene

Lonza is a global leader in the manufacture and supply of biocidal actives and formulations for use in a variety of hygiene applications.

Lonza supplies antimicrobial active ingredients to customers who formulate end use products. Lonza's service groups support customers with technical and regulatory assistance that can accelerate products from concept to market launch.

Lonza can also provide access to a broad portfolio of antimicrobials which is available with different levels of registration support. Development and registration of disinfectant products is time consuming, costly and can be complex. It requires product development and characterisation, microbiological testing, and registration with the relevant regulatory

authorities. This typically takes up to several years and costs up to several hundred thousand Euros.

Leveraging Lonza's regulatory expertise and experience and its microbiology and formulation capabilities, we provide ready-to-market solutions that enable our customers to access these markets faster and at lower costs.

A key benefit of using Lonza's formulations is, that the use concentration and consequently the development costs are already well-defined at the start of a market launch project, which allows reliable business planning.

# Biocidal Actives

Name	Active Ingredients	Concentration	Form	Solvent
Lonzabac® 12.100	Bis[3-aminopropyl]dodecylamine	100%	Liquid	–
Lonzabac® 12.30	Bis[3-aminopropyl]dodecylamine	30%	Liquid	Water
Bardac® 114	Blend of quaternary ammonium compounds	50%	Liquid	Isopropanol, water
Bardac® 205 M	Blend of quaternary ammonium compounds	50%	Liquid	Ethanol, water
Bardac® 205 M(I)	Blend of quaternary ammonium compounds	50%	Liquid	Isopropanol, water
Bardac® 208 M	Blend of quaternary ammonium compounds	80%	Liquid	Ethanol, water
Bardac® 2240	Didecyldimethylammonium chloride	40%	Liquid	Water
Bardac® 22	Didecyldimethylammonium chloride	50%	Liquid	Isopropanol, water
Bardac® 2270	Didecyldimethylammonium chloride	70%	Liquid	Isopropanol, water
Bardac® 2270E	Didecyldimethylammonium chloride	70%	Liquid	Ethylene glycol, water
Bardac® 2280	Didecyldimethylammonium chloride	80%	Liquid	Ethanol, water
Bardac® 2280i	Didecyldimethylammonium chloride	80%	Liquid	Isopropanol, water
Bardac® 2080	Octyldecyldimethylammonium chloride	80%	Liquid	Ethanol, water
Bardap® 26	Didecylmethylpoly(oxyethyl)-ammonium propionate	70%	Liquid	Polyethylene glycol, Ethylene glycol
Barquat® BAC 50	Alkyl (C12–C16) dimethylbenzylammonium chloride	50%	Liquid	Water
Barquat® BAC 80	Alkyl (C12–C16) dimethylbenzylammonium chloride	80%	Liquid	Water, Ethanol
Barquat® CB50	Alkyl (C12–C18) dimethylbenzylammonium chloride	50%	Liquid	Water
Barquat® CB80	Alkyl (C12–C18) dimethylbenzylammonium chloride	80%	Liquid	Isopropanol, water
Barquat® DM50	Alkyl (C12–C16) dimethylbenzylammonium chloride	50%	Liquid	Water
Barquat® DM50EP	Alkyl (C12–C16) dimethylbenzylammonium chloride	50%	Liquid	Water
Barquat® DM80	Alkyl (C12–C16) dimethylbenzylammonium chloride	80%	Liquid	Ethanol, water
Barquat® LB50	Alkyl (C12–C14) dimethylbenzylammonium chloride	50%	Liquid	Water
Barquat® MB50	Alkyl (C12–C16) dimethylbenzylammonium chloride	50%	Liquid	Water
Barquat® MB80	Alkyl (C12–C16) dimethylbenzylammonium chloride	80%	Liquid	Ethanol, water
Barquat® MS100	Alkyl (C12–C14) dimethylbenzylammonium chloride	> 98.5%	Powder	–
Barquat® 4250-Z	Alkyl (C12–C18) dimethylbenzylammonium chloride and Alkyl (C12–C14) dimethylethylbenzylammonium chloride	50%	Liquid	Water
Barquat® 4280-Z	Alkyl (C12–C18) dimethylbenzylammonium chloride and Alkyl (C12–C14) dimethylethylbenzylammonium chloride	80%	Liquid	Ethanol, water
Carboquat® HE	Didecyldimethylammonium carbonate/bicarbonate	50%	Liquid	Propylene glycol, water, methanol
Cosmocil® PG	Poly(hexamethylene biguanide) hydrochloride / Polyhexanide	20%	Liquid	Water
Lonzabac® BG	Poly(hexamethylene biguanide) hydrochloride	20%	Liquid	Water
Lonzabac® MP	Magnesium monoperoxyphthalate	100%	Powder	–
Spectradyne®	Chlorhexidine digluconate	20%	Liquid	Water
Vantocil® IB	Poly(hexamethylene biguanide) hydrochloride	20%	Liquid	Water
Vantocil® TG	Poly(hexamethylene biguanide) hydrochloride	20%	Liquid	Water



Remarks	REACH Supported	BPR Supported	Medical Device	Healthcare	Household	Industrial/ Institutional	Food Processing	Veterinary	Name
Tertiary amine with mycobactericidal activity	■	■	■	■	■	■	■	■	Lonzabac® 12.100
Tertiary amine with mycobactericidal activity	■	■	■	■	■	■	■	■	Lonzabac® 12.30
Unique blend for hard surface disinfection	■	■	■	■	■	■	■	■	Bardac® 114
Blend of QACs for hard surface disinfection	■	■	■	■	■	■	■	■	Bardac® 205 M
Blend of QACs for hard surface disinfection	■	■	■	■	■	■	■	■	Bardac® 205 M(I)
Blend of QACs for hard surface disinfection	■	■	■	■	■	■	■	■	Bardac® 208 M
Multi purpose QAC	■	■	■	■	■	■	■	■	Bardac® 2240
Multi purpose QAC	■	■	■	■	■	■	■	■	Bardac® 22
Multi purpose QAC	■	■	■	■	■	■	■	■	Bardac® 2270
Multi purpose QAC	■	■	■	■	■	■	■	■	Bardac® 2270E
Multi purpose QAC	■	■	■	■	■	■	■	■	Bardac® 2280
Multi purpose QAC	■	■	■	■	■	■	■	■	Bardac® 2280i
QAC for hard surface disinfection	■	■	■	■	■	■	■	■	Bardac® 2080
Chloride-free QAC	■	■	■	■	■	■	■	-	Bardap® 26
Benzalkonium chloride	■	■	■	■	■	■	■	■	Barquat® BAC 50
Benzalkonium chloride	■	■	■	■	■	■	■	■	Barquat® BAC 80
Benzalkonium chloride	■	■	■	■	■	■	■	■	Barquat® CB50
Benzalkonium chloride	■	■	■	■	■	■	■	■	Barquat® CB80
Benzalkonium chloride	■	■	■	■	■	■	■	■	Barquat® DM50
Benzalkonium chloride - Product specification matches the specification of the European Pharmacopeia	■	■	■	■	■	■	■	■	Barquat® DM50EP
Benzalkonium chloride	■	■	■	■	■	■	■	■	Barquat® DM80
Benzalkonium chloride, low foaming	■	■	■	■	■	■	■	■	Barquat® LB50
Benzalkonium chloride	■	■	■	■	■	■	■	■	Barquat® MB50
Benzalkonium chloride	■	■	■	■	■	■	■	■	Barquat® MB80
Benzalkonium chloride	■	■	■	■	■	■	■	■	Barquat® MS100
Provides superior biocidal action against a broad spectrum of microbial organisms	■	■	■	■	■	■	■	■	Barquat® 4250-Z
Provides superior biocidal action against a broad spectrum of microbial organisms	■	■	■	■	■	■	■	■	Barquat® 4280-Z
Chloride-free QAC	■	■	■	■	-	-	-	-	Carboquat® HE
Antimicrobial for Healthcare and pharmaceutical applications	■	■	■	-	-	-	-	-	Cosmocil® PG
Broad spectrum, fast-acting bactericide and virucide, non-foaming disinfectant	■	■	■	■	■	■	■	-	Lonzabac® BG
Oxygen releaser	■	-	■	-	-	-	-	-	Lonzabac® MP
Antimicrobial for healthcare applications	■	■	■	■	■	■	-	■	Spectradyne®
Broad spectrum, fast-acting bactericide and virucide, non-foaming disinfectant	■	■	■	■	■	■	■	■	Vantocil® IB
Broad spectrum, fast-acting bactericide and virucide, non-foaming disinfectant	■	■	■	■	■	■	■	■	Vantocil® TG

# Preservatives

Name	Active Ingredients	Concentration	Form	Solvent
Bardac® 2240	Didecyldimethylammonium chloride	40%	Liquid	Water
Cosmocil® CQ	Poly(hexamethylene biguanide) hydrochloride / Polyaminopropyl biguanide	20%	Liquid	Water
Vantocil® TG	Poly(hexamethylene biguanide) hydrochloride	20%	Liquid	Water
Dantogard® 2000	Dimethylol dimethyl hydantoin	Proprietary blend	Liquid	Water
Dantogard Plus® liquid	Dimethylol dimethyl hydantoin + 3-Iodo-2-propynylbutylcarbamate	Proprietary blend	Liquid	Water, butylene glycol
Isocil® Ultra 1.5	5-Chloro-2-methyl-[2H]-isothiazol-3-one + 2-Methyl-[2H]-isothiazol-3-one	1.5%	Liquid	Water
Isocil® Ultra 14	5-Chloro-2-methyl-[2H]-isothiazol-3-one + 2-Methyl-[2H]-isothiazol-3-one	14%	Liquid	Water
Lonzabac® 12.30	Bis(3-aminopropyl)dodecylamine	30%	Liquid	Water
Lonzaserve® ID	Dimethylol dimethyl hydantoin + 5-Chloro-2-methyl-[2H]-isothiazol-3-one	71.5%	Liquid	Water
Omacide® IPBC 30 DPG	3-Iodo-2-propynylbutylcarbamate	30%	Liquid	Dipropylene glycol
Proxel® GXL	1,2-Benzisothiazol-3[2H]-one	20%	Liquid	Dipropylene glycol
Proxel® LV	1,2-Benzisothiazol-3[2H]-one	20%	Liquid	Dipropylene glycol, water
Proxel® AQ	1,2-Benzisothiazol-3[2H]-one	9.25%	Liquid	Water
Proxel® BD20	1,2-Benzisothiazol-3[2H]-one	20%	Liquid	Water
Proxel® BZ	1,2-Benzisothiazol-3[2H]-one + zinc pyrithione	20%	Liquid	Water
Sodium Omadine® 40%	Sodium pyrithione	40%	Liquid	Water



Regulatory

Remarks	Regulatory		Name
	REACH Supported	BPR Supported*	
Aqueous solution of DDAC, with zero-VOC	-	■	Bardac® 2240
Antimicrobial for healthcare and ophthalmic applications	■	-	Cosmocil® CQ
Effective preservative, particularly suited for wet wipes	■	-	Vantocil® TG
Cost effective preservative with a free formaldehyde content of less than 0.1%	■	■	Dantogard™ 2000
Patented broad spectrum preservative blend, with a free formaldehyde content less than 0.1%	■	■	Dantogard Plus® liquid
Broad spectrum and established preservative, copper-free	■	■	Isocil® Ultra 1.5
Broad spectrum and established preservative, dilutable with water, copper-free	■	■	Isocil® Ultra 14
Aqueous solution of triamine	-	■	Lonzabac® 12.30
Cost effective broad spectrum preservative blend, with a free formaldehyde content less than 0.1%	■	-	Lonzaserve® ID
Established and effective fungicide	■	-	Omacide® IPBC 30 DPG
Solution of BIT in DPG to preserve products from spoilage from bacteria, yeasts and fungi	■	■	Proxel® GXL
Low viscosity equivalent to Proxel GXL, with less glycol, lower VOC, and easier pumping	■	■	Proxel® LV
Aqueous solution of BIT, offering low viscosity and zero-VOC	■	■	Proxel® AQ
Aqueous dispersion of BIT, with zero-VOC	■	■	Proxel® BD20
Avoids EUH208 allergen label on end products when dosed at typical use concentrations	■	-	Proxel® BZ
Effective fungicide, with broad pH and heat stability	■	■	Sodium Omadine® 40%

\*Lonza intends to support these products under PT6 of the Biocidal Products Regulation (BPR, EU (No) 528/2012)



## Surfactants

Name	Active Ingredients	Concentration	Form	Solvent
Amphoterge® K-2N *	Disodium Cocoamphodipropionate	40%	Liquid	Water, methanol
Barlox® 10 S *	Decyldimethylamine oxide	30%	Liquid	Water
Barlox® 12 *	Cocoalkyldimethylamine oxide	30%	Liquid	Water

\*This surfactant complies with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents.

Name	Active Ingredients	Concentration	Form	Solvent
Aldo® LF	Blend of anti-foaming agents	–	Liquid	–
Bardac® LF	Dioctyldimethylammonium chloride	50%	Liquid	Ethanol, water
CarboShield® 1000E	Didecyl dimethyl ammonium carbonate/bicarbonate	50%	Liquid	Propylene glycol, methanol, water
Lonzabac® GA	Guanidine, N,N <sup>''</sup> -1,3-propanediylbis-, N-coco alkyl derivatives, diacetates	80%	Liquid	Water, isopropanol
Lonzagard® Benzethoniumchloride USP	Benzethonium chloride	100%	Powder	–

## CE Mark European Medical Device Directive 93/42/EEC Certified Formulations



Name	Active Ingredients	Concentration	Form	Function
Formulation CE-50	N,N-Bis(3-aminopropyl)dodecylamine Didecylmethylpolyoxyethylammonium propionate	13.6% 13.6%	Liquid	Disinfectant and cleaner for the manual pre-treatment of invasive and non-invasive medical devices including surgical instruments and endoscopes





Remarks	Regulatory		Applications					Name
	REACH Supported	CE	Healthcare	Household	Industrial/ Institutional	Food Processing	Veterinary	
Excellent detergency properties	■	■	-	■	■	-	■	Amphoterge® K-2N *
Surfactant and multi function additive	■	■	■	■	■	■	■	Barlox® 10 S *
Surfactant and multi function additive	■	■	■	■	■	■	■	Barlox® 12 *

Remarks	Regulatory		Applications					Name
	REACH Supported	CE	Healthcare	Household	Industrial/ Institutional	Food Processing	Veterinary	
Defoaming agent for aqueous based systems	■	■	-	■	-	-	-	Aldo® LF
Low foaming QAC for medical device formulations	■	■	-	-	-	-	-	Bardac® LF
Corrosion inhibitor Compatible with typical nonionic surfactants	■	-	-	-	■	■	■	CarboShield® 1000E
Compatible with nonionic surfactants and quaternary ammonium compounds	■	■	■	-	-	-	-	Lonzabac® GA
Specifications meet USP requirements	■	-	■	-	-	-	-	Lonzagard® Benzethoniumchloride USP



# Lonzagard® Formulations

Name	Active Ingredients	Concentration	Form	Function
DR-19aB	Didecyldimethylammonium chloride	4.50%	Liquid	Disinfectant
DR-LS-13N	N,N-Bis(3-aminopropyl)dodecylamine	6.75%	Liquid	QAC-free disinfectant cleaner
DM 114-10	Blend of different quaternary ammonium compounds	9.90%	Liquid	Disinfectant
DR-25aN	Didecyldimethylammonium chloride	6.93%	Liquid	Disinfectant cleaner
DR-60	Didecyldimethylammonium chloride	6.00%	Liquid	Disinfectant cleaner
	N,N-Bis(3-aminopropyl)dodecylamine	5.00%		
DR-70	Didecyldimethylammonium chloride	6.50%	Liquid	Disinfectant cleaner
	N,N-Bis(3-aminopropyl)dodecylamine	5.30%		
ID-50	N,N-Bis(3-aminopropyl)dodecylamine	12.6%	Liquid	Pre-disinfectant cleaner for medical instruments
	Didecylmethylpolyoxyethylammonium propionate	12.6%		

## DR-19aB

Aldehyde-free general purpose disinfectant.

- Compatible with a wide range of materials, including PVC and aluminium
- Excellent cleaning properties
- Also registered for sale in the Netherlands

## DR-LS-13N

Disinfectant cleaner based on triamine technology.

- Proven efficacy at low temperatures
- DVG and VAH compliant
- Excellent cleaning properties
- Effective against bacteria, yeast, enveloped viruses and mycobacteria (including TB)
- Does not contain VOCs, chlorine or quats

## DM 114-10

Disinfectant based on a blend of three different quats.

- Supplied at neutral pH
- Compatible with sensitive materials such as acrylic glass, linoleum, PVC and anodised aluminium
- VAH compliant
- Effective against Bacteria, Yeast, Norovirus and Enveloped Viruses



Regulatory	Applications						Name
	BPR Supported	Healthcare	Household	Veterinary	Industrial / Institutional	Food & Beverage	
	■	-	-	■	■	■	DR-19aB
	■	■	■*	■	■	■	DR-LS-13N
	■	■	■*	■	■	■	DM 114-10
	■	■	-	■	■	■	DR-25aN
	■	■	-	■	■	■	DR-60
	■	■	-	■	-	-	DR-70
-	-	■	-	■	-	-	ID-50

\* The Ready-to-Use (RTU) versions of DM 114-10 and DR-LS-13N are suitable for use in the Household segment\*

## DR-25aN

An aldehyde-free high performance disinfectant cleaner with outstanding microbicidal performance.

- Broad spectrum of efficacy; bacteria, yeast, fungi, enveloped & non-enveloped viruses and *C. difficile* spores\*
- Cleans and disinfects in the presence of dirt, blood and proteins
- DVG and VAH compliant
- Also registered for sale in the Netherlands according to authorisation Number: 14873N

\* The *C. difficile* claim does not apply in the Netherlands for Lonzagard® DR-25aN

## DR-60

- An aldehyde-free non-sticky disinfectant cleaner.
- Effective against Bacteria, Yeast, Enveloped Viruses and Norovirus
- A non-sticky formulation suitable for floors and other surfaces in Food & Beverage, Healthcare and Industrial & Institutional settings
- Disinfectant cleaner based upon quat and triamine technologies; therefore free of aldehyde & oxidative chemistries
- Excellent cleaning performance
- Compatible with a wide range of materials (as a concentrate & 1% aqueous dilution)

## ID-50

An aldehyde-free pre-disinfectant with a good efficacy and outstanding material compatibility.

- Can be used in ultrasonic bath-based disinfection
- Good efficacy under high soiling conditions
- Low corrosive potential
- Cleaning and disinfection in one step

## DR-70

An aldehyde-free high performance disinfectant cleaner for healthcare applications with outstanding microbicidal performance.

- Comprehensive spectrum of efficacy, including efficacy against Bacteria, Fungi, Yeast, Enveloped and Non-enveloped Viruses (including poliovirus), Spores and Mycobacteria (including TB)
- High performance in medical conditions / cleans and disinfects in the presence of dirt, blood and proteins
- Applicable across multiple fields of use in healthcare and hygiene critical settings
- Disinfectant cleaner based on triamine and quat technologies; therefore free of aldehyde & oxidative chemistries
- Excellent cleaning performance
- Compatible with a wide range of materials (as a concentrate & 1% aqueous dilution)





#### **EMEA Region**

Lonza Ltd  
Muenchensteinerstrasse 38  
4002 Basel, Switzerland  
Tel: +41 61 316 81 11  
hygiene@lonza.com

Use Biocides Safely. Review and follow all product safety instructions. All product information corresponds to Lonza's knowledge on the subject at the date of publication, but Lonza makes no warranty as to its accuracy or completeness and Lonza assumes no obligation to update it. Product information is intended for use by recipients experienced and knowledgeable in the field, who are capable of and responsible for independently determining the suitability of ingredients for intended uses and to ensure their compliance with applicable law. Proper use of this information is the sole responsibility of the recipient. This information relates solely to the product as an ingredient. It may not be applicable, complete or suitable for the recipient's finished product or application; therefore republication of such information or related statements is prohibited. Information provided by Lonza is not intended and should not be construed as a license to operate under or a recommendation to infringe any patent or other intellectual property right. No claims are made herein for any specific intermediate or end-use application.

© 2017 Lonza

BPR refers to Biocidal Product Regulation; regulation (EU) 528/2012.

Hygiene – Hygiene Product Catalogue – 06/17

**[www.lonza.com](http://www.lonza.com)**  
**[www.lonza.com/hygiene](http://www.lonza.com/hygiene)**