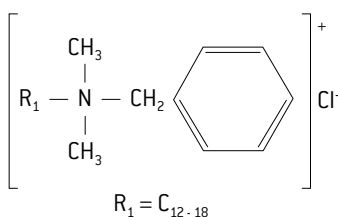


Barquat® CB-50 / CB-80 Antimicrobials

Barquat® CB-50 and Barquat® CB-80 Antimicrobials both contain the active substance C₁₂₋₁₈ Alkyl dimethyl benzyl ammonium chloride (ADBAC). The active is a cationic molecule offering good surfactant properties and can be formulated together with non-ionic- and/or amphoteric surfactants. ADBAC has a broad antimicrobial efficacy against gram-positive and gram-negative bacteria, yeast, and enveloped viruses. High antimicrobial efficacy is maintained across a broad pH-range. In formulated

products, ADBAC is stable around a wide range of pH levels and is used in a number of applications such as food processing, institutional, veterinary, healthcare areas, and medical devices. Single-active C₁₂₋₁₈ ADBAC products are available in different active concentrations and solvent combinations.



Active Ingredient

C₁₂₋₁₈ Alkyl dimethyl benzyl ammonium chloride (ADBAC)

Barquat® CB-50 / CB-80		
	CAS-No.	EC-No.
BPR**:	68391-01-5	269-919-4
REACH	–	939-253-5

REACH Reg. No.: 01-2119965180-41-XXXX

REACH Name: Quaternary ammonium compounds, benzyl C12-C16 (even numbered)-alkyldimethyl chlorides

Application Areas

Customers use C₁₂₋₁₈ Alkyl dimethyl benzyl ammonium chloride as an active ingredient in biocidal products for hygiene applications such as:

- Hospitals and healthcare settings
- Food & beverage processing
- Food handling and preparation facilities
- Institutional cleaning
- Veterinary hygiene
- Medical Devices

Further non-hygiene applications include uses in Construction Material Preservatives, Preservative for liquid-cooling and processing systems, Slimicides and Embalming liquids.

Overview of Barquat® CB Antimicrobials

The data and information provided in the following tables is not part of a product specification. For purposes of Quality Assurance please refer to the Product Specification and the Certificate of Analysis, which are available on request.

Product	Average active content	Typical C-chain distribution	Average content of organic solvent	Average content of water
Barquat® CB-50	50% C ₁₂₋₁₈ ADBAC	C ₁₀ 2%, C ₁₂ 57%, C ₁₄ 23%, C ₁₆ 11%, C ₁₈ 7%	–	50% water
Barquat® CB-80	80% C ₁₂₋₁₈ ADBAC	C ₁₀ 2%, C ₁₂ 57%, C ₁₄ 23%, C ₁₆ 11%, C ₁₈ 7%	7% Propan-2-ol	13% water

Typical Physical & Chemical Properties

Average values	Barquat® CB-50	Barquat® CB-80
Physical state	Liquid	Liquid
Appearance	Clear colourless to pale yellow	Clear colourless to pale yellow
Colour (APHA)	max 150	max 200
Odour	characteristic	characteristic
Average Molecular Weight	364	364
Density	0.98 g/ml (20°C)	0.95 g/ml (25°C)
Flash Point (Abel Pensky c.c.)	> 100 °C	~38 °C
Viscosity (dynamic, 20°C)	~100–300 mPa · s	~500 mPa · s
pH (1% in Water, 20°C)	5.0–7.0	5.0–7.0
VOC Free	Yes	No
Product Shelf Life	2 Years	2 Years

Packaging

Barquat® CB-50

- 200 kg net weight drum
- 960 kg net weight IBC
- Max. 20mt

Barquat® CB-80

- 190 kg net weight drum

Storage

Barquat® CB-50 and Barquat® CB-80 Antimicrobials must be stored in the original sealed container. Products can be stored in the sealed original packaging for a period of up to two years after manufacture, (which is stated in the Certificate of Analysis).

Low temperature exposure (below setting point* / melting temperature*) may result in a physical change in the material such as haze formation, crystallisation or stratification of the product. In such cases, the material can be reconstituted by warming (taking into consideration the flash point* and relevant safety data*), ensuring sufficient ventilation to prevent pressurisation, and not leaving the container fully open to the atmosphere. Subsequent agitation / mixing will result in the material being reconstituted. This process can be accelerated at higher temperatures, but it is recommended that the temperature should not exceed 40°C. To the best of our knowledge the product quality and the antimicrobial efficacy of homogenised material should not be affected.

Formulation Guidelines

Barquat® CB-50 and Barquat® CB-80 Antimicrobials can be used alone or in combination with other biocides to formulate products for a wide range of professional and consumer hygiene applications.

All formulations must be tested for chemical and physical stability and biocidal performance to ensure suitability before placing on the market. The efficacy of such formulations depends on a number of parameters, such as pH value and the ratio between ADBAC / surfactants (typically 1:1).

Technical Service

For further technical guidance and support, please contact your nearest Lonza sales representative or office.

Risk Assessment and Management

Lonza professionals have a wide expertise in the fields of Safety, Health, and the Environment. Lonza Specialty Ingredients is committed to and uses this expertise in understanding the suitability of ADBAC for specific applications. Please contact your local Lonza office should you have questions in this area.

Health and Safety

Safety Data Sheets for Barquat® CB-50 and Barquat® CB-80 Antimicrobials can be supplied upon request. They should be read and understood by all supervisory personnel and employees before using the product. If there is any doubt please contact your local Lonza sales office for advice.

Regulatory Information

The active substance in Barquat® CB-50 and Barquat® CB-80 Antimicrobials is being supported through the European Biocidal Products Regulation (BPR)** Active Substance Review Program for these Product Types:

- PT1 Human hygiene;
- PT2 Private area and public health area disinfectants and other biocidal products;
- PT3 Veterinary hygiene biocidal products;
- PT4 Food and feed area.

Customers must ensure compliance with any local regulatory requirements which may apply to their end use product, formulated with Barquat® CB-50 and Barquat® CB-80 Antimicrobials.

Also supported for non-hygiene product types:

- PT10 (Construction Material Preservatives)
- PT11 (Preservatives for liquid-cooling and processing systems)
- PT12 (Slimecidic)
- PT22 (Embalming liquids)

EMEA Region

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Use biocides safely. Always read the label and product information before use. 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 and safety 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.

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* Please refer to the corresponding Safety Data Sheet

** Biocidal Products Regulation; Regulation (EU) 528/2012

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