



KALPASTHANA LIFE CARE PRODUCTS PVT. LTD.

Regd. Office: Plot No. 92P & 93, KIADB Industrial Area, Humnabad, Bidar District, Karnataka - 585330, India.

Email: info@kalpasthanalifecareproducts.com | Website: www.kalpasthanalifecareproducts.com

TECHNICAL DATA SHEET

Benzalkonium Chloride 50% (BKC)

CAS No: 8001-54-5

PRODUCT DESCRIPTION

Benzalkonium Chloride (BKC) is a highly effective quaternary ammonium compound. Known scientifically as Alkyldimethylbenzylammonium chloride (ADBAC), it is a powerful cationic surfactant and broad-spectrum biocide widely used across pharmaceutical, personal care, and industrial water treatment applications. Benzalkonium Chloride 50% (BKC) is an essential active ingredient for formulating premium disinfectants, hand sanitizers, and antiseptic solutions. Kalpasthana Life Care Products manufactures this biocide with strict quality control, ensuring a highly stable 50% aqueous solution perfectly suited for cosmetics, pharmaceutical preservatives, and institutional cleaning products.

SPECIFICATIONS

Product Name	Benzalkonium Chloride 50% (BKC)
Synonyms / Abbreviations	Alkyldimethylbenzylammonium chloride, ADBAC, BC50, Quaternary ammonium compound
CAS Number	8001-54-5
Molecular Formula	Mixture
Molecular Weight	Mixture g/mol
Appearance	Clear, Colorless to Pale Yellow Liquid
Purity (Titration)	50% ± 2% (Aqueous Solution)
pH (5% Solution)	6.0 - 8.0
Density	~0.98 g/cm ³ at 20°C

APPLICATIONS & USAGE

Benzalkonium Chloride 50% (BKC) is a premium quaternary ammonium cationic surfactant and broad-spectrum biocide. It is highly effective at low concentrations against Gram-positive/negative bacteria, algae, and enveloped viruses. BKC is an essential active ingredient in hospital-grade disinfectants, sanitizers, wood preservatives, water treatment systems, and is the primary antimicrobial preservative in ophthalmic, nasal, and otic pharmaceutical formulations.

- Broad-Spectrum Antiseptic: Exerts rapid bactericidal and algaecidal action by disrupting cell membranes.
- Ophthalmic & Pharmaceutical Preservative: The most widely trusted preservative in eye drops, nasal sprays, and topical creams.
- Industrial Biocide: Widely applied in cooling towers, paper mills, swimming pools, and livestock biosecurity programs for pathogen control.

DISCLAIMER & SAFETY

Disclaimer: The information contained in this Technical Data Sheet is accurate to the best of our knowledge. It is provided for informational purposes only. The user assumes all risk and liability for the product's use in manufacturing or commercial applications. Products are intended for industrial manufacturing and laboratory research purposes only. Please refer to the Material Safety Data Sheet (MSDS) for detailed safety, handling, storage, and disposal guidelines.

Plant Address: Plot No. 105, Part A, KIADB Industrial Area, Gadvanthi Village, Humnabad, Bidar District, Karnataka - 585330, India.

Phone: +91 7019420005