

## **Disinfectant “BAC 80”**

For use in medical and preventive institutions, public utility service facilities, educational institutions, penitentiary institutions and military units

**Manufacturer:** LLC **Biotecs**, Georgia

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### **General Information**

The concentrated solution of disinfectant “BAC 80” is a transparent, colorless liquid.

### **Composition**

Contains as active substance:

Alkyldimethyl benzalkonium chloride (quaternary ammonium compound) – 8%

Also contains functional additives (non-ionic surfactants, etc.).

Solution pH:  $8.5 \pm 1.4$

### **Shelf Life**

2 years in original manufacturer packaging.

After opening, remains stable until expiration date if storage conditions are maintained.

Diluted working solution stored in a closed container remains usable for 14 days.

Visual inspection of working solution is required; in case of color change, turbidity or sediment formation, the solution must be replaced.

### **Packaging**

Concentrated solution packed in polyethylene canisters (20 L, 5 L) and bottles (1 L) or according to customer request.

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## **1.2 Properties**

Benzalkonium chloride is a quaternary ammonium biocide with pronounced disinfecting and washing properties.

It exhibits:

- Bactericidal activity (against Gram-negative and Gram-positive microorganisms, including particularly dangerous infections, including tuberculosis);

- Virucidal activity (against lipid-enveloped viruses, including herpes virus, HIV, coronaviruses and others);
- Fungicidal activity (Candida albicans, Trichophyton spp., mold fungi);
- Algicidal activity.

The product is biodegradable and environmentally safe.

According to acute toxicity parameters:

- When ingested – Class 3 (moderately hazardous);
- By inhalation exposure (C20 evaporation) – Class 4 (low toxicity).

Working solutions 0.05%–0.8% do not cause local skin irritation after single exposure.

Repeated exposure of 1% or higher concentration solutions may cause irritation of visible mucous membranes and skin.

The diluted solution does not cause corrosion of metal and leaves no residue or stains.

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## **Intended Use**

Designed for disinfection of bacterial (including tuberculosis), viral and fungal infections in:

- Medical and preventive institutions
- Pharmacies
- Laboratories (clinical, microbiological, bacteriological, virological and others)
- Procedure rooms
- Blood collection and transfusion centers
- Food industry enterprises
- Pharmaceutical and cosmetic industries
- Beauty salons
- Public utility and service facilities
- Social institutions (homes for elderly, disabled)
- Educational institutions
- Penitentiary institutions

- Military barracks
  - Public facilities
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**Used for:**

- Washing, cleaning and disinfecting surfaces (floors, walls, doors, furniture, sanitary equipment, apparatus, tools, kitchen and laboratory utensils including disposable items, toys, personal hygiene items, cleaning inventory);
  - Installation of disinfection barriers;
  - Disinfection of ventilation and air-conditioning systems;
  - Cleaning and disinfection of waste containers and transport;
  - Daily and general sanitation cleaning;
  - Disinfection of transport (medical, cargo, passenger, food transport);
  - Shoe disinfection (rubber, plastic, polymer materials);
  - Domestic use when necessary.
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## **2. Preparation and Use of Working Solutions**

### **2.1 Preparation**

Working solution is prepared by mixing concentrate with potable water at room temperature.

### **2.2 Disinfection Methods**

Cleaning, soaking, immersion and spraying.

### **2.3 Surface Disinfection**

Wipe with cloth soaked in working solution or spray.

After completion – wet cleaning and ventilation required.

### **2.4 Transport**

After disinfection of food transport – surfaces must be rinsed with water.

### **2.5 Sanitary Equipment**

Brush or wipe; rinse with water after disinfection.

## **2.6 Patient Care Items**

Fully immerse or wipe; large toys may be sprayed; rinse after treatment.

## **2.7 Dishes**

Immerse fully in solution (2 L per set).

Objects must be covered at least 1 cm.

Rinse after treatment.

## **2.8 Dishwashing Tools**

Immerse, rinse, dry.

## **2.9 Laundry**

Soak at 4 L per 1 kg dry laundry (5 L for tuberculosis).

Rinse in washing machine.

## **2.10 Cleaning Equipment**

Immerse fully; wash after.

## **2.11 Shoes**

Immerse; rinse and dry.

## **2.12 Medical Devices**

Fully immerse; channels must be filled without air pockets;

Rinse thoroughly.

## **2.13 General Disinfection**

Performed according to bacterial/fungal regime.

## **2.14 Beauty Salon Instruments**

Working solution may be reused for 14 days.

## **2.15 Air Disinfection**

Room hermetically sealed; ventilation off;

After exposure – ventilate 10–15 minutes.

## **2.16 Ventilation Systems**

Quarterly preventive disinfection;  
Apply by spraying or aerosolization.

## **2.17 Disinfection Barriers**

Use 1:10 solution.

Volume depends on mat size.

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### **Table 1 – Disinfection Regimes**

(Concentrations and exposure times preserved exactly as in original)

- Surfaces: 1:200 – 30 min – wiping
  - Sanitary equipment/transport: 1:100 – 30 min – wiping/spraying
  - Linen without contamination: 1:200 – 30 min – soaking
  - Linen with contamination: 1:30 – 120 min – soaking
  - Dishes without residues: 1:200 – 15 min – immersion
  - Dishes with residues: 1:50 – 60 min – immersion
  - Toys: 1:100 – 30 min
  - Cleaning equipment: 1:30 – 120 min
  - Patient care items: 1:100 – 30 min
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### **Table 2 – Ventilation System Disinfection**

(Full concentrations preserved exactly)

1:200 / 1:100 – 60 / 30 min – wiping/spraying

1:100 / 1:50 – aerosolization/spraying

1:30 – 120 min – immersion

Air ducts disinfection only by epidemiological indication.

Processing by 1–2 m segments.

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## **3. Pre-Sterilization Cleaning**

Used for glass, plastic, metal instruments including surgical and dental.

Endoscopes:

Use 1:250 solution; exposure time 15 min; temperature  $\geq 18^{\circ}\text{C}$ .

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#### **4. Safety Measures**

Use gloves and mask.

Avoid contact with skin and eyes.

Follow hygiene rules.

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#### **5. First Aid**

Respiratory irritation – fresh air, rinse mouth.

Skin contact – rinse with water.

Eye contact – rinse with water, use eye drops.

Ingestion – activated charcoal (10–20 tablets per glass of water); seek medical attention.

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#### **6. Storage and Transportation**

Store in closed, dry, ventilated warehouse, protected from sunlight and heat sources at  $+1^{\circ}\text{C}$  to  $+40^{\circ}\text{C}$ .

Keep out of reach of children.

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**Manufacturer:** LLC **Biotecs**,

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