

# NANOBIOCIDE

## Povidone-Iodine 10% Antiseptic Solution NANO BIO CIDE (containing 1.2% iodine)



Topical antiseptic

Multipurpose disinfection

Extensive Microbial Spectrum & Effective against fungi, spores, viruses, protozoa and yeasts

**Disinfectant Group:** Povidone-Iodine 10% Antiseptic Solution NANOBIOCIDE

**Dosage Form:** Liquid

**Active Ingredients:** Contains 1.2% iodine, potassium iodide, glycerin, ethanol, and other excipients.

**Mechanism of Action and Antimicrobial Spectrum:** Povidone-Iodine 10% Disinfectant Solution NANOBIOCIDE acts through the gradual release of free iodine from its complex, enabling sustained antimicrobial activity. Free iodine reacts with microbial cell membrane lipids and surface proteins, increasing membrane permeability and causing leakage of cellular contents. It also binds to sulfhydryl (-SH), amine (-NH<sub>2</sub>), hydroxyl (-OH), and carbonyl (C=O) groups in essential proteins and enzymes, leading to denaturation, structural degradation, and enzyme inactivation. Furthermore, by inhibiting key enzymes and damaging microbial DNA and RNA, iodine disrupts metabolic processes and vital cellular functions, ultimately preventing replication and survival. This mechanism effectively eliminates bacteria, viruses, fungi, and resistant spores. Povidone-Iodine 10% exhibits a broad-spectrum microbicidal effect against microorganisms such as *Streptococcus pyogenes*, *Staphylococcus aureus*, *Helicobacter* spp., *Enterococcus faecalis*, *Streptococcus agalactiae*, *Candida albicans*, *Herpes simplex virus*, *Tinea* spp., *Aspergillus niger*, *Microsporum* spp., and *Trichophyton* spp.

**Target Species:** Livestock, poultry, horses, and companion animals.

### Indications:

- Disinfection of wounds, burns, cuts, oral cavity, and tongue
- Treatment of skin infections, abrasions, and fungal dermatitis
- Pre- and post-milking teat disinfection (Pre-Dip & Teat-Dip)
- Skin disinfection before and after surgery or parturition
- Broad-spectrum sanitation of poultry farms, livestock facilities, hatcheries, and veterinary clinics
- Disinfection of tools, cages, and farm or poultry equipment

### Directions for Use:

Indications	Dilution ratio	Description
Pre-milking teat disinfection (Pre-Dip)	1:5	Using spray or dip method
Post-milking teat disinfection (Teat-Dip)	Ready-to-use	Dipping
Wounds, cuts, and burns	Ready-to-use	Apply using a spray or sterile gauze soaked with the solution
Equipment and instrument disinfection	Use 20 mL in 1 liter of water	Dip and rinse after 20 minutes
Poultry houses, livestock facilities, hatcheries, veterinary clinics, hospitals, etc	1:10	Spray in the environment

### Storage Conditions

- Store at a temperature between 5°C and 30°C, away from direct sunlight.
- Keep in a well-ventilated area and away from flammable materials.
- Always close the container tightly after each use to maintain product stability and effectiveness

### Precautions

- Do not use simultaneously with other chemicals, alkaline substances, or insecticides.
- Avoid contact with eyes.
- Keep out of reach of children.