

# NANOBIOCIDE

## Iodine Tincture Antiseptic Solution 2% NANO BIO CIDE (Containing 2% Iodine)



Topical antiseptic

Multipurpose disinfection

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

**Disinfectant Group:** Iodine Tincture Antiseptic Solution 2% NANOBIOCIDE

**Dosage Form:** Liquid

**Active Ingredients:** Iodine tincture (containing 2% active iodine), ethanol, potassium iodide, and other excipients.

**Mechanism of Action and Antimicrobial Spectrum:** Iodine Tincture Antiseptic Solution 2% NANOBIOCIDE, containing molecular iodine ( $I_2$ ) and potassium iodide (KI) in an alcoholic solution, exerts its broad-spectrum antimicrobial effect through the controlled release of active iodine. The liberated iodine interacts with the lipid components of microbial cell membranes, increasing membrane permeability and causing leakage of intracellular contents. Additionally, iodine binds to functional groups such as sulfhydryl (-SH), hydroxyl (-OH), amine (-NH<sub>2</sub>), and carbonyl (C=O) groups in essential proteins and enzymes, leading to their denaturation and inactivation. Moreover, by interfering with microbial DNA and RNA, it disrupts cellular metabolism and prevents replication and survival of microorganisms.

**Effective Against:** A wide range of microorganisms including bacteria, viruses, fungi, molds, mycobacteria, and spores such as Streptococcus pyogenes, Staphylococcus aureus, Helicobacter spp., Enterococcus faecalis, Streptococcus agalactiae, Herpes simplex virus, Tinea spp., Candida albicans, Aspergillus niger, Microsporum spp., and Trichophyton spp.

**Target Species:** Small ruminants, large livestock, horses, and companion animals.

### Indications

- Disinfection of wounds, scratches, and minor cuts
- Preoperative skin antisepsis prior to minor or major surgical procedures
- Treatment of superficial infections and prevention of secondary skin infections
- Disinfection of injection sites prior to vaccination or medical treatment
- Umbilical disinfection in newborn livestock (such as calves, lambs, etc.) immediately after birth
- Cleaning and sanitizing of animal udders (in diluted form) to prevent mastitis
- Suitable for disinfecting water storage tanks
- Field disinfection of surgical and veterinary instruments

### Directions for Use

- Moisten a piece of sterile gauze or cotton with the solution and apply it evenly over the target area.

### 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.