

# Dermacyn™ Wound Care

## What is Dermacyn™ Wound Care?

Dermacyn™ Wound Care is a super-oxidized solution intended for use in the debridement, irrigation and moistening of acute and chronic wounds, ulcers, cuts, abrasions and burns. Through reducing the microbial load and assisting in creating a moist environment, it enables the body to perform its own healing process. Dermacyn™ Wound Care can be broadly applied within a comprehensive wound treatment.

Dermacyn™ Wound Care is based on the patented Microcyn™ technology: a sterile super-oxidized, pH-neutral, purified water-based solution. It contains reactive oxygen species in a stable formulation, has an extended shelf life and remains harmless to humans, animals and the environment.



These are a series of photos showing the foot of a diabetes patient where the Microcyn™ technology was used as part of a comprehensive treatment over a four months period.

## Features

- **SUPER-OXIDIZED SOLUTION:** Dermacyn™ Wound Care is applied to mechanically debride (remove necrotic tissue), flush and cleanse the wound surface. The reactive oxygen species assist in promoting the body's own healing process by optimal combination of the microbial load reduction and moistening properties of Dermacyn™ Wound Care.
- **STERILE:** Dermacyn™ Wound Care is provided sterile and protects itself against contamination.
- **BROAD SPECTRUM:** Can be used within a comprehensive wound treatment.
- **SAFE:** Does not damage tissue and is non-toxic and non-irritating to human skin, eyes or throat.
- **READY TO USE:** No mixing or dilution required. Dermacyn™ Wound Care has a one-year shelf life.
- **COST EFFICIENT:** May help reduce overall patient treatment and hospitalization. The application of Dermacyn™ Wound Care will not lead to resistant responses, as may be associated with persistent use of antibiotics.
- **NON HAZARDOUS:** Compatible with gauze material, acrylics and a wide variety of plastics, metals and elastomers. Safe to the environment, non-flammable with no special handling, storage or disposal considerations required. Dermacyn™ Wound Care leaves no hazardous residuals behind.

## Clinical Evidence - Diabetic Foot Ulcers

Diabetic foot ulcers are the leading cause of morbidity, mortality and excessive care costs in patients with diabetes. More than 135 million people worldwide have diabetes; of these 60 to 70% have diabetic nerve damage which may lead to a lower limb amputation and around 15% will present with Diabetic Foot Ulcers. (The American Podiatric Medical Association). Dr. Fermin Martinez, President of the Mexican Diabetic Foot Association, first began using Microcyn™ Technology in the treatment of diabetic foot patients in his clinic in Veracruz, Mexico. "The first thing we noticed," remarked Dr. Martinez, "was the elimination of the fetid odor, which is typical for these ulcers."





### Mode of Action and Production

Dermacyn™ Wound Care is produced by means of a proprietary electrolysis process, developed in-house, utilizing a sophisticated, unique multi-chamber system. The solution is manufactured from purified water and Sodium Chloride. The electrolysis process separates and captures the ions, forming a sterile, pH-neutral solution with a stable controlled formula of reactive oxygen and chlorine species.

Dermacyn™ Wound Care surrounds single-cell microorganisms and establishes a hypo-osmotic environment. The reactive oxygen species are enabled to disrupt the cell membrane's enzymes. This process is similar to phagocytosis, which is used by the human body to kill pathogenic microorganisms.

Human cells are not effected by Dermacyn™ Wound Care because they are too closely compacted and cannot be penetrated.

The manufacturing conditions and process parameters are fully controlled and monitored real time. Dermacyn™ Wound Care is manufactured at Oculus Innovative Sciences, an ISO 13485:2003 certified company.

### Usage

- Ready to use without diluting, mixing or adding activators.
- Compatible with gauze material and acrylics.
- To be directly applied to the affected area, by immersion, pouring, spraying, pressure jetting or via a saturated gauze or dressing.
- Treatment:
  - Immerse up to 15 minutes, daily, during initial treatment.
  - Soak/spray at each dressing change, as and when required.

- Harmless to humans and common work surfaces, no special safety precautions needed.
- No special storage precautions needed.
- Dermacyn™ Wound Care remains stable for one year, if stored at ambient conditions in its original un-opened package.
- The solution should be applied within 30 days after the container is opened.
- Environmentally safe. No special disposal precautions required.

### Specifications

#### Ingredients:

Oxidized Water (H<sub>2</sub>O)  
 Sodium Hypochlorite (NaOCl)  
 Hypochlorous Acid (HOCl)  
 Hydrogen Peroxide (H<sub>2</sub>O<sub>2</sub>)  
 Ozone (O<sub>3</sub>)  
 Chlorine Dioxide (ClO<sub>2</sub>)  
 Sodium Hydroxide (NaOH)  
 Sodium Carbonate (Na<sub>2</sub>CO<sub>3</sub>)  
 Sodium Chloride (NaCl)

**pH:** 6.2 to 7.8

