

Frontier Pharmaceutical
10 Ponderosa Dr. Melville, NY 11747

White Lightning® Wound and Skin Care Spray

MSDS No.: Dg 74
Emergency Phone: (631) 367-692-7642
April 11, 2012

Page 1 of 3

Section I – Identification

Product: White Lightning® Wound and Skin Care Spray aqueous solution, chlorine dioxide complex, ClO₂ ClO₂ antiseptic spray.

Chemical: Oxidant

CAS No.: 10049-04-04

Section II – Hazardous Ingredients

Component: not toxic or irritating. No fumes or odors given off.

Section III – Physical Data

Chlorine dioxide complex 100 ppm concentration

Boiling Point at 1 ATM.: Liquid, 100.5° C, Chlorine dioxide, 11° C.

Evaporation Rate: similar to water

Vapor Pressure: ~17 mm Hg @ 25° C

Specific Gravity: S.G. 1.6.

Vapor Density (AIR): NA

pH: 3.7 – 4.2

Appearance and odor: Clear, no odor.

Water Solubility: Complete. Solubility 3g/l

Molecular Weight: Chlorine dioxide complex 135

Section IV – Fire & Explosion Data

Flash Point: not possible

Auto Ignition Temp: not possible

Explosion data: NA

Flammability Limit (AIR): NA

Special Fire-Fighting procedure: none

Extinguishing Media: The solution will not burn.

Unusual Fire Explosion Hazard: None

Frontier Pharmaceutical
10 Ponderosa Dr. Melville, NY 11747

White Lightning® Wound and Skin Care Spray

MSDS No. DG-74

Page 2 of 3

Section V – Reactivity Data

Stability: White Lightning® Wound and Skin Care Spray once sprayed will remain stable for disinfection purposes for about one hour. Store spray bottle in a cool place. Over 100° F will slowly reduce efficacy.

Condition to Avoid: keep out of the heat and sun. Will react with reducing agents.

Hazardous Decomposition Products: Decomposition products are not reactive, and are mostly chloride and a small part chlorate.

Hazardous Polymerization: will not occur.

Reactions with Water: Chlorine dioxide complex does not hydrolyze or ionize in water and is highly soluble.

Section VI – Health Hazard Information

Threshold Limit Value (TLV): NA

Effects of Overexposure: NA

Carcinogenicity: Chlorine dioxide is not a carcinogen.

Eye Contact: Flush immediately with water. Get medical attention, if irritation persists. In a Draize method test, 100mg of a chlorine dioxide disinfection compound, similar to White Lightning® Wound and Skin Care Spray, was applied to conjunctival sacs of the eye of rabbits. The cornea and iris remained normal. The conjunctivae were initially irritated. The eyes were normal after 4 and 7 days.

Skin Contact: not irritating on skin or wounds. In a subchronic skin test, a dose of a chlorine dioxide disinfectant, similar to White Lightning® Wound and Skin Care Spray, was applied to the backs of rabbits daily for 4 weeks. No significant changes were noted in experimental animals compared with controls. There was no organ abnormality. For chlorine dioxide only, acute dermal rat LD₅₀>2,000 mg/kg.

Inhalation: no odor or fumes.

Ingestions: Drink water or milk if ingested. Rat Oral LD₅₀ males 2.25 g/kg, females 0.78 g/kg. With a chlorine dioxide disinfection compound similar to White Lightning® Wound and Skin Care Spray, ingestion of 150mg/kg by male rats showed no symptoms of toxicity. At higher doses toxicity appeared, especially in female rats. In a human trial, normal healthy male volunteers drank 5ppm chlorine dioxide for 12 weeks. No detrimental physical responses were noted.

MSDS No. DG-74

Page 2 of 3

Frontier Pharmaceutical
10 Ponderosa Dr. Melville, NY 11747

White Lightning® Wound and Skin Care Spray

MSDS No. DG-74

Page 3 of 3

Section VII – Spill, Leak, and Disposal Procedures

Spill, Leaks: (Steps to be taken) Flush spills with water. Solution can be neutralized with sodium sulfite or other reducing agent. Ferrous iron is effective for chlorite and chlorate removal.

Section VIII – Special Protection Information

Respiratory Protection: NA

Ventilation: NA

Protective Gloves: Not necessary.

Eye Protection: If eyes are contacted with the liquid spray, flush immediately with water.

Other Protective Equipment: None.

Section IX – Special Precautions and Comments

Storage and Handling Information: Avoid eye contact (good manufacturing practice recommends use of chemical safety goggles for all applications involving chemical handling).

Other Precautions: Liquid may bleach clothing. Store in a cool place.

Judgments as to the suitability of information herein for purchase purposes are necessarily purchaser's responsibility. Therefore, although reasonable care has been taken in preparation of such information, FRONTIER PHARMACEUTICAL, INC. extends no warranties, makes no representations and assumes no responsibility as to accuracy or suitability of such information for application to purchaser's intended purpose of or consequences of its use. Disposal of hazardous materials may be subject to federal, state or local laws or regulations.