PRODUCT: VIRKON-S EPA REG # 62432-1
IMPORTER: Pharmacal Research Laboratories
            Naugatuck, CT 06770
            Tel: 800-243-5350

Virkon is the trade name of a disinfectant active against viruses, bacteria, and fungi pathogenic to animals and poultry. It is composed of peroxoxygen compounds, organic acids, surfactant and buffer.

The information provided in this Material Safety Data Sheet refers to the Virkon S in-use solutions, unless otherwise stated.

SECTION 1 - MANUFACTURING INFORMATION
Product is manufactured by Antec International, Windham Road, Chilton Industrial Estate, Sudbury, Suffolk CO10 6XD, England

SECTION 2 - COMPOSITION INFORMATION
Active Ingredients
Potassium peroxymonosulfate
Sodium Chloride

20.4%
1.5%

Equivalent to 9.75% available chlorine

SECTION 3 - PHYSICAL/CHEMICAL CHARACTERISTICS
Boiling Point
Vapor Pressure
Vapor Density
Evaporation Rate
Solubility in Water
Specific Gravity
Melting Point
Appearance

Not Applicable
Not Applicable
Not Applicable
Not Applicable
Freely soluble in water approximately 65g/l at 20°C (68°F)
1.07
Not Applicable
Yellow liquid

SECTION 4 - FIRE AND EXPLOSION HAZARD DATA
Flash Point
Flammable Limits
Extinguishing Media
Special Fire Fighting Procedures

Not Applicable
Not Applicable
Water, Dry Powder, CO2
Not Applicable

SECTION 5 - HEALTH - HAZARD DATA
Acute Dermal Toxicity:
Powder: LD50 greater than 20g/kg in rabbits

Acute Oral Toxicity:
Powder: LD50 of 170g/kg in male rats and 116g/kg in female rats
Dilution: LD50 of 4123 mg/kg in male and female rats This is considered to be slightly toxic (LD50 500-5000mg/kg)

Acute Inhalation Toxicity:
Powder: LC50 greater than 6147mg/l of air over 4 hours in male and female rats
Dilution: LC50 @4 hour exposure is greater than 5 mg/l (by analytical determination). Test article was calculated at a 5% w/w dilution

Guinea Pig Dermal Sensitisation:
Powder does not appear to be a primary skin irritant, fatiguing agent or skin sensitizer.
Dilution: No risk phrase is required for VIRKON 1% solution in respect to its skin sensitasation potential. Does not appear to be a primary skin irritant

Primary Skin Irritation: The powder is corrosive to the skin of rabbits with an irritation index of 7.00. A dilution of 5% results in an irritation index of 0.08 in rabbits
Primary Eye Irritation: The powder is corrosive to rabbits eyes. A dilution of 5% produces conjunctival irritation

Effects of Overexposure: Inhalation of dust may cause choking, coughing or wheezing. A 1% solution is normally non-irritating.
Emergency First Aid
Hazardous To Humans and Domestic Animals - Danger, powder is corrosive. Causes skin burns and irreversible eye damage. Harmful if swallowed, absorbed through skin or inhaled. Do not get in eyes, on skin, or on clothing. Wear protective clothing and rubber gloves. Avoid breathing dust. Wear goggles, face shield or safety glasses. Wash thoroughly with soap and water after handling. Remove contaminated clothing and wash before reuse. Corrosive statement refers to powder only, not in-use solution.

Practical Treatment:
If in eyes, hold eyelids open and flush with a steady, gentle stream of water for 15 minutes. Get prompt medical attention.
If on skin, wash with plenty of soap and water. Get medical attention if irritation persists.
If inhaled or symptoms of coughing, choking or wheezing are troublesome, remove to fresh air and seek medical attention.
If swallowed, drink promptly a large quantity of water. Avoid alcohol. Get immediate medical attention.
Notice to Physician: Probable mucosal damage may contraindicate the use of gastric lavage.

SECTION 6 - REACTIVITY DATA
Stability: Solution is stable for 7 days.
Conditions To Avoid: Moisture, direct sunlight and excessive heat.
Incompatibilities: Avoid alkaline materials.
Hazardous Decomposition Products: Releases sulfur dioxide gas upon heating above 70°C (158°F).

SECTION 7 - SPILL OR LEAK PROCEDURE
Contain spilled material. Neutralize and then dispose of material in accordance with all Federal, State, and Local Regulations.

CHEMICAL NEUTRALIZATION:
Treating Virkon S 1% with an alkali will expedite the degradation of the oxidizing system, and neutralize the acidity. By adding Sodium Bicarbonate at a rate of 30g per liter of Virkon S 1% solution, the pH will raise to approximately 7.6, which is most beneficial when considering neutralization. This equates to 114 grams or 4 ounces of Sodium Bicarbonate per 1 US gallon of Virkon S 1:100 (1%) solution.

SECTION 8 - SPECIAL PROTECTION INFORMATION
Respiratory Protection: Dust/Mist Respirator: N95 3M # 8210
Protective Clothing: PVC Gloves, Goggles

SECTION 9 - TRANSPORTATION INFORMATION
TRANSPORTATION INCIDENT INFORMATION: NOT TRANSPORTED IN THIS FORM.

DOT IDENTIFICATION NUMBER: N/A

SHIPPING DESCRIPTION: NOT TRANSPORTED IN THIS FORM.

The information contained in this MSDS is, to the best of Antec International’s and Pharmacal Research Laboratories’s knowledge, complete and accurate. Antec uses many sources and references for gathering this information. Thus Antec and Pharmacal Research Laboratories cannot guarantee completeness or accuracy and disclaims all liability for its handling and use.