Pharmacal Research Laboratories Inc. • 562 Captain Neville Drive, Waterbury CT 06705 (203) 755-4908 • 800-243-5350 • FAX (203) 755-4309 www.pharmacal.com

Issued Date 03/12/2012

# I. <u>IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY</u>

PRODUCT: VIRKON-S Tablets EPA REG # 71654-6

**IMPORTER:** Pharmacal Research Laboratories

562 Captain Neville Drive Waterbury CT 06705

Tel: 800-243-5350

**Supplier**: Dupont /Antec International Limited

Sudbury Suffolk CO10 2XD Tel: 44-(0)1787-377305

All information provided in this Material Safety Data Sheet refers specifically to the Virkon S Tablets, as supplied, & **not** the in-use solutions, unless otherwise stated.

Transportation Emergency-CHEMTREC: 1-800-424-9300

#### COMPOSITION/INFORMATION ON INGREDIENTS

#### Components

Material

Potassium Peroxymonosulfate Sulfamic Acid Potassium Persulfate

CAS Number % <br/>70693-62-8 <50 <br/>5329-14-6 5-10 <br/>7727-21-1 < 2

Unique Label Statements

KEEP OUT OF REACH OF CHILDREN \*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

### HAZARDS IDENTIFICATION

# Potential Health Effects

Eye contact with product diluted in water according to package directions (1% solution) is not an eye irritant. Eye contact with dry powder may cause eye corrosion or ulceration. Severe eye damage may result if not immediately treated.

Skin contact with product diluted in water according to package directions (1% solution) is not a skin irritant. Skin contact with dry powder may cause skin burns or ulceration. In rare cases, skin contact with dry powder may cause an allergic skin reaction in sensitive individuals.

Ingestion of this product may cause gastritis, with stomach pain, nausea, vomiting, diarrhea, headache or weakness; possibly progressing to necrosis or hemorrhage with gross overexposure.

Inhalation of this product may cause nose bleed or irritation of the upper respiratory passages, with coughing, sneezing, runny nose and sore throat. Gross overexposure may cause ulceration of mucous membranes.

VIRKON-S Tablets PAGE 1 of 5

Pharmacal Research Laboratories Inc. • 562 Captain Neville Drive, Waterbury CT 06705 (203) 755-4908 • 800-243-5350 • FAX (203) 755-4309 www.pharmacal.com

Carcinogenicity Information

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

#### FIRST AID MEASURES

#### First Aid

IF ON SKIN: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a Poison Control Center or doctor for further treatment advice.

IF IN EYES: Hold eye open & rinse slowly & gently with water for 15-20 minutes. Remove contact lenses, if present after 5 minutes, then continue rinsing eye. Call a Poison Control Center or doctor for further treatment advice.

IF INHALED: Move person to fresh air. If person in not breathing call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a Poison Control Center or doctor for further treatment advice.

IF SWALLOWED: Call Poison Control Center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor. Do not give anything by mouth to an unconscious person.

### FIRE FIGHTING MEASURES

### Extinguishing Media

Dry Powder (Sand or Met-L-X), CO2.

Fire Fighting Instructions

Evacuate personnel to a safe area. Wear self-contained breathing apparatus (SCBA) and full protective equipment.

# ACCIDENTAL RELEASE MEASURES

### Safeguards (Personnel)

NOTE: Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up.

### Spill Clean Up

Sweep, shovel, vacuum or scoop up into suitable containersfor disposal. Prevent tablets from becoming moist while awaiting disposal. Moist product must be kept away from combustible material and stored in a manner that allows suitable ventilation of the waste.

VIRKON-S Tablets PAGE 2 of 5

Pharmacal Research Laboratories Inc. • 562 Captain Neville Drive, Waterbury CT 06705 (203) 755-4908 • 800-243-5350 • FAX (203) 755-4309 www.pharmacal.com

### HANDLING AND STORAGE

### Handling (Personnel)

Do not get in eyes, on skin or clothing. Avoid inhalation. Wash thoroughly after handling. Wash contaminated clothing prior to reuse.

#### Storage

Store in a cool, dry place.

Keep containers tightly sealed and avoid coming into contact with moisture.

#### EXPOSURE CONTROLS/PERSONAL PROTECTION

## Engineering Controls

Use only with adequate

ventilation. Personal Protective

## Equipment

#### EYE/FACE PROTECTION

Wear coverall chemical splash goggles. Additionally, wear a face shield where the possibility exists for face contact due to splashing or spraying of material.

RESPIRATORS Wear NIOSH approved respiratory protection as appropriate.

#### PROTECTIVE CLOTHING

Where there is potential for skin contact have available and wear as appropriate impervious gloves, apron, pants, jacket, hood and boots.

# Exposure Guidelines

Applicable Exposure Limits Potassium Peroxymonosufate

PEL (OSHA) :None Established TLV (ACGIH) :None Established

AEL \* (DuPont) :1 mg/m3, total dust, 8 & 12 Hr. TWA

Sulfamic Acid

PEL (OSHA) :None Established TLV (ACGIH) :None Established

AEL \* (DuPont) :0.5 mg/m3, 8 & 12 Hr. TWA 1.5 mg/m3, 15 minute TWA

# Potassium Persulfate

TLV (ACGIH) :0.1 mg/m3, 8 Hr. TWA

 AEL is DuPont's Acceptable Exposure Limit. Where governmentally imposed occupational exposure limits which are lower than the AEL are in effect, such limits shall take precedence.

VIRKON-S Tablets PAGE 3 of 5

Pharmacal Research Laboratories Inc. • 562 Captain Neville Drive, Waterbury CT 06705 (203) 755-4908 • 800-243-5350 • FAX (203) 755-4309 www.pharmacal.com

#### PHYSICAL AND CHEMICAL PROPERTIES

### Physical Data

Boiling Point: Decomposes on heating

Solubility in Water: ~12 tablets/litre @ 20 deg C

pH: 2.5-3.0 Form: Tablet Color: Yellow

Odor: No distinct odor Specific Gravity: ~1.07

## STABILITY AND REACTIVITY

### Chemical Stability

Stable at normal temperatures and storage conditions.

Incompatibility with Other Materials

Incompatiblity with strong alkalies and moisture. When wet reacts slowly in solution to make small amount of hypochlorous acid or hypochlorite, depending on pH.

### Decomposition

Hazardous decomposition products are: sulfur dioxide and chlorine under extreme conditions if powder is allowed to become damp through incorrect storage or long exposure to the atmosphere.

## Polymerization

Polymerization will not occur.

# DISPOSAL CONSIDERATIONS

## Waste Disposal

Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations.

#### TRANSPORTATION INFORMATION

# Shipping Information

Not Regulated as a hazardous material by DOT, IMO, or IATA.

#### REGULATORY INFORMATION

## U.S. Federal Regulations

TSCA Inventory Status : Listed.

VIRKON-S Tablets PAGE 4 of 5

Pharmacal Research Laboratories Inc. • 562 Captain Neville Drive, Waterbury CT 06705 (203) 755-4908 • 800-243-5350 • FAX (203) 755-4309 www.pharmacal.com

OTHER INFORMATION

Additional Information

EPA Reg. No. 71654-6

The data in this Material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.

Responsible for MSDS: MSDS Coordinator

> : DuPont Clean & Disinfect
Address : Wilmington, DE 19898

Telephone : (800) 441-7515

This information is based upon technical information believed to be reliable. It is subject to revision as additional knowledge and experience is gained.

VIRKON-S Tablets PAGE 5 of 5