

MATERIAL SAFETY DATA SHEET

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 3/7/2007

I. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY

PRODUCT: VIRKON-S EPA REG # 71654-6

IMPORTER: Pharmacal Research Laboratories

562 Captain Neville Drive Waterbury CT 06705

Tel: 800-243-5350

Supplier: 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

	CAS Number	%
Potassium Peroxymonosulfate	70693-62-8	<50
Sulfamic Acid	5329-14-6	5-10
Potassium Persulfate	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.

MATERIAL SAFETY DATA SHEET

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 is 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 containers for 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.

MATERIAL SAFETY DATA SHEET

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 Peroxymonosulfate

PEL (OSHA)	:None Established
TLV (ACGIH)	:None Established
AEL * (DuPont)	:1 mg/m ³ , total dust, 8 & 12 Hr. TWA

Sulfamic Acid

PEL (OSHA)	:None Established
TLV (ACGIH)	:None Established
AEL * (DuPont)	:0.5 mg/m ³ , 8 & 12 Hr. TWA 1.5 mg/m ³ , 15 minute TWA

Potassium Persulfate

TLV (ACGIH)	:0.1 mg/m ³ , 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.

MATERIAL SAFETY DATA SHEET

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

Incompatibility 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.

MATERIAL SAFETY DATA SHEET

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.