

**MATERIAL SAFETY DATA SHEET****CHEMSPEC ® • 901 N. NEWKIRK STREET • BALTIMORE, MD 21205 • (410) 675-4800**

HEALTH = 1, FLAMMABILITY = 0, REACTIVITY = 0, SPECIAL = NONE, DEGREE OF HAZARD: 4 = EXTREME, 3 = HIGH, 2 = MODERATE, 1 = SLIGHT, 0 = INSIGNIFICANT

PRODUCT NAME: **POWDERED FORMULA 77**

DOCUMENT CODE: Powder Formula 77

CHEMICAL FAMILY: Mixture

DATE: 09/20/93

DATE REVIEWED: 08/23/99

**EMERGENCY 24-HOUR TELEPHONE # 1-800-424-9300 (CHEMTREC)**

N/A = Not applicable

N/D = Not determined

**SECTION I: HAZARDOUS INGREDIENTS/HEALTH HAZARD DATA**

This product has not been tested as a whole for health effects on animals or humans. According to the OSHA Hazardous Communications Standard (29 CFR 1910.1200) any hazardous ingredients that comprise >1.0% of the material and any carcinogenic ingredients that comprise >0.1% must be listed on the MSDS.

**SECTION I (a): List of carcinogenic ingredients at >0.1%.**

None.

**SECTION I (b): List of hazardous ingredients at >1.0%.**

NAME	CAS NO.
<b>SODIUM CARBONATE</b>	<b>497-19-8</b>
May cause eye and skin irritation. Inhalation may irritate nose, throat and lungs. Ingestion may irritate upper GI tract and can be harmful in very large amounts. Oral rat LD50 is 2.8 g/kg. OSHA PEL and ACGIH TLV not available.	
<b>SODIUM METASILICATE</b>	<b>6834-92-0</b>
Corrosive to eyes, skin, respiratory and digestive tracts. OSHA PEL and ACGIH TLV not available.	
<b>D-LIMONENE</b>	<b>68647-72-3</b>
Repeated or prolonged skin contact may cause irritation, contact dermatitis or sensitization. May cause eye irritation and CNS depression. Ingestion of large quantities, repeated dermal or inhalation overexposures may produce kidney or bladder effects. Oral rat LD50 is 3000 mg/kg; dermal rabbit LD50 is >5000 mg/kg. OSHA PEL and ACGIH TLV not available.	
<b>DECYL POLYETHOXY PHOSPHORIC ACID</b>	<b>52019-36-0</b>
May be irritating to eyes, skin and nasal passageways. OSHA PEL and ACGIH TLV not available.	
<b>ALCOHOL ETHOXYLATES</b>	<b>68131-39-5</b>
May cause eye and skin irritation. Ingestion may cause abdominal discomfort, nausea and diarrhea. Oral rat LD50 is 2-5 g/kg; dermal rabbit is 1-3 g/kg. OSHA PEL and ACGIH TLV not available.	

**SECTION II: EMERGENCY AND FIRST AID PROCEDURES**

EYES: Flush with water for at least 15 min. Consult physician.  
SKIN: Remove contaminated clothing. Thoroughly wash exposed skin with soap and water.  
INHALED: Remove to fresh air. If symptoms persist consult physician.  
INGESTION: Drink lots of water. Consult physician.  
PHYSICIAN: Treatment based on judgment of attending physician.

**SECTION III: PHYSICAL / CHEMICAL DATA**

APPEARANCE AND ODOR: Light yellow powder with citrus odor. WATER SOLUBILITY, % BY WT: 40 - 45  
LOOSE BULK DENSITY: 0.60 - 0.65 g/cc % VOLATILE BY WT.: 10 - 13 pH @ USE: 10.0 - 11.0  
BOILING POINT: N/A pH of a 1% solution: 11.0 - 12.0

**SECTION IV: FIRE AND EXPLOSION DATA**

FLASH POINT: N/D AUTO-IGNITION TEMPERATURE: N/D EXPLOSIVE LIMITS - LEL: N/D UEL: N/D  
EXTINGUISHING MEDIA: Water, fog, CO<sub>2</sub> or alcohol foam.  
SPECIAL FIRE FIGHTING PROCEDURES: Use NIOSH/MSHA approved self-contained positive-pressure breathing apparatus and protective clothing where this material is involved in a fire.  
UNUSUAL FIRE AND EXPLOSION HAZARD: None known.

**SECTION V: REACTIVITY DATA**

STABILITY: Stable HAZARDOUS POLYMERIZATION: Will not occur. INCOMPATIBILITY: Strong acids and oxidizing agents.  
HAZARDOUS DECOMPOSITION/COMBUSTION PRODUCTS: Possibly oxides of carbon and phosphorous, H<sub>2</sub>O and unidentified organic compounds.

**SECTION VI: SPILLS, LEAKS AND DISPOSAL PROCEDURES**

WASTE DISPOSAL: In accordance with Federal, State and Local regulations.  
NEUTRALIZING CHEMICALS: Dilute weak acids, such as vinegar.

**SECTION VII: PROTECTION MEASURES**

VENTILATION: Use in well ventilated area. EYE PROTECTION: Chemical resistant safety glasses.  
RESPIRATORY PROTECTION: Use NIOSH/MSHA approved dust mask when airborne dust is anticipated.  
GLOVES: Rubber gloves. OTHER PROTECTIVE EQUIPMENT: Body-covering clothing should be worn.

**SECTION VIII: SPECIAL PRECAUTIONS**

One should always use chemicals with awareness of potential hazards, known and unknown, and their effect on the human system. We urge users to minimize employee exposure to all chemicals, including this product and to keep the level of exposure commensurate with good industrial hygiene practices.

**DISCLAIMER OF LIABILITY**

The manufacturer and seller warrants that this product conforms to its standard specifications when used according to directions. As the conditions or methods of use are beyond our control, we do not assume any responsibility and expressly disclaim any liability for use of this product. Information contained herein is believed to be true and accurate but all statements or suggestions are made without any warranty, expressed or implied, regarding accuracy of the information, the hazards connected with the use of the material and the results to be obtained from the use thereof.