

**Material  
Safety  
Data  
Sheet**
**Hi-Yield® Copperas**
**SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

Name: Voluntary Purchasing Groups, Inc.	Box 460, Bonham, TX 75418
Emergency Telephone: (903) 583-5501 or (800) 424-9300 (Chemtrec)	
For Additional Information Contact: Product Manager or Chemtrec	Date Prepared: 12/27/01
Common Name (Used on Label): Hi-Yield® Copperas	Chemical Family: Iron II Sulfate
Chemical Name: Ferrous Sulfate heptahydratae	Formula: FeSO47H2O
Trade Name & Synonyms: Hi-Yield® Copperas	

**SECTION 2 - COMPOSITION/INFORMATION ON INGREDIENTS**

HAZARDOUS COMPONENT	CAS NUMBER	% (TYPICAL)	TLV (UNITS)	PEL (UNITS)
Ferrous Sulfate heptahydrate	7720-78-7	Proprietary	1 mg/m3	1 mg/m3

PEL: Permissible Exposure Limit established by the Occupational Safety and Health Administration.  
TLV: Threshold Limit Value recommended by the American Conference of Governmental Industrial Hygienists.

**SECTION 3 - PHYSICAL DATA**

BOILING POINT (°F) Not established	SPECIFIC GRAVITY (H <sub>2</sub> O=1) 1.899	VAPOR PRESSURE (mm Hg) Not established
PERCENT VOLATILE BY VOLUME (%) Not established	VAPOR DENSITY (AIR=1) Not established	EVAPORATION RATE (ethyl ether=1) Not established
SOLUBILITY IN WATER Miscible	REACTIVITY IN WATER Does not apply	
APPEARANCE AND ODOR Light blue-green solid; sour acidic odor		

**SECTION 4 - FIRE AND EXPLOSION DATA**

FLASH POINT (°F) Does not apply	FLAMMABLE LIMITS IN AIR (% by volume) Lower: <u>Not determined</u> Upper: <u>Not determined</u>	
EXTINGUISHING MEDIA Use extinguisher appropriate to surrounding fires.	AUTO IGNITION TEMPERATURE Does not apply	
UNUSUAL FIRE AND EXPLOSION HAZARDS Not determined		
SPECIAL FIRE FIGHTING PROCEDURES Use fire-fighting procedures appropriate to surrounding fires.		

**SECTION 5 - HEALTH INFORMATION**

<b>PRIMARY ROUTES OF EXPOSURE AND TARGET ORGANS</b>		
Eyes, skin, upper respiratory tract, gastrointestinal tract		
<b>SIGNS AND SYMPTOMS OF EXPOSURE</b>		
<b>(1) ACUTE OVEREXPOSURE</b>		
EYE CONTACT: Irritation, itching, stinging. SKIN CONTACT: Irritation. INHALATION: Irritation of upper respiratory tract. INGESTION: Irritation of G.I. tract, stomach ache, acidic or sour taste, and possible shock, liver damage, tachycardia, or death.		
<b>(2) CHRONIC OVEREXPOSURE</b>		
Not determined		
<b>MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE</b>		
Dermatitis, asthma or conjunctivitis		
<b>CHEMICAL/COMPONENT LISTED AS CARCINOGEN OR POTENTIAL CARCINOGEN</b>		
None		
<b>NTP</b> <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	<b>IARC</b> <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	<b>OSHA</b> <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO
<b>OTHER EXPOSURE LIMITS</b>		
LD50 (oral-rat)-1480 mg/kg		
<b>EMERGENCY AND FIRST AID PROCEDURES</b>		
EYE CONTACT: Flush with water for 15 minutes. Seek medical attention if irritation persists. SKIN CONTACT: Remove contaminated clothing. Flush with water for several minutes. Seek medical attention if irritation persists. INGESTION: Seek medical attention immediately. Do not induce vomiting. INHALATION: Remove victim to fresh air. If not breathing, give artificial respiration. Seek medical attention immediately.		

**SECTION 6 - REACTIVITY DATA**

<b>STABILITY</b> <input type="checkbox"/> Unstable <input checked="" type="checkbox"/> Stable	<b>CONDITIONS TO AVOID</b> Extremely high temperatures.
<b>INCOMPATIBILITY (Materials to Avoid)</b> Oxidizing agents and alkalis	
<b>HAZARDOUS DECOMPOSITION PRODUCTS</b> Sulfur oxides, SO <sub>2</sub> and SO <sub>3</sub>	
<b>HAZARDOUS POLYMERIZATION</b> <input type="checkbox"/> May Occur <input checked="" type="checkbox"/> Will Not occur	<b>CONDITIONS TO AVOID</b> Not determined

**SECTION 7 - SPILL OR LEAK PROCEDURES**

<b>STEPS TO BE TAKEN IN CASE MATERIAL IS LEAKED OR SPILLED</b> Don protective equipment if needed. See Section 8. Sweep into a labeled container for disposal.
<b>WASTE DISPOSAL METHOD</b> Dispose of in accordance with Federal, State, and local regulations.

**SECTION 8 - PERSONAL PROTECTION INFORMATION****RESPIRATORY PROTECTION**

NIOSH/MSHA approved respirator if concentration is above the exposure limit.

**VENTILATION**

Use in a well-ventilated area.

**PROTECTIVE GLOVES**

If skin contact is likely to occur.

**EYE PROTECTION**

Safety goggles

**OTHER PROTECTIVE CLOTHING OR EQUIPMENT**

Not determined

**SECTION 9 - SPECIAL PRECAUTIONS****PRECAUTIONS TO BE TAKEN IN HANDLING & STORING**

Store in a dry area below 75 degrees F. Keep container closed when not in use.

**OTHER PRECAUTIONS**

Not determined.

**SECTION 10 - OTHER INFORMATION**

The information contained within was obtained from authoritative sources and is believed to be accurate for the manner in which the product is intended to be used. Other uses could result in ramifications, which are not included within this document.