

# Material Safety Data Sheet

## TIGER 90CR<sup>®</sup> Organic Sulphur

Update Nov/12

**Emergency Phone numbers:**

For shipments coming from Calgary, AB, Canada or Stockton, CA, USA Call collect— 403-279-2616 (8am –4pm, Mon-Fri) or CANTEC 613-996-6666 (24 hours)

For Shipments coming from Atmore, AL, USA Call collect—251-368-2560 (8am– 4pm, Mon-Fri) or Chemtrec 800-424-9300 (24 hours)

**Tiger-Sul Products (Canada) Co.**

6444 -42 St. S.E.  
Calgary, AB T2C 2V1 CANADA  
Telephone: (403) 279-2616  
Fax: (403) 236-9049

**Tiger-Sul Products, LLC**

Post Office Box 5  
Atmore, AL 36502 USA  
Telephone: (251) 368-2560  
Fax: (251) 368-4964

**Tiger-Sul Products, LLC**

65 Stork Rd  
Stockton, CA, 95203  
Telephone: (209) 943-0478  
Fax: (209) 943-5470

### Section I: Product Identification and Uses

**Common Trade Name:** Sulphur fertilizer (TIGER 90CR<sup>®</sup> Organic Sulphur)

**Synonym:** prilled sulphur

**Chemical Family:** Elemental sulphur

**Reportable Quantity:** None

**Marine Pollutant:** No

**US and Canadian Shipments:** None regulated as per schedule 2 section 33 (b) exemption for sulphur

**International Shipments:**

**AIR(IATA):** Exempted under special provision A 105 SEA (IMGD): Exempted as per sulphur observations part 1 & 2

**Appearance:** Specifically formed product in the shape of pastilles.

### Section II: Hazardous Ingredients (Mixtures Only)

\* material components with chlorates, nitrates or other oxidizing agents may be explosive. Sulphur with alkalis or alkaline earth.

**Notice: the data and information presented herein are based upon tests, research and reports which are considered by us to be reliable and accurate. The data and information is presented without warranty, guarantee or liability on our part, and are presented to the customer for his/her own consideration, investigation and verification.**

### Section III: Hazardous Ingredients

| Name           | CAS No.   | Concentration |
|----------------|-----------|---------------|
| Sulphur        | 7704-34-9 | 90%           |
| Bentonite Clay |           | 10%           |

| <b>Section IV: Physical Data</b>                                                      |
|---------------------------------------------------------------------------------------|
| <b>Boiling Point:</b> 444°C (832°F)                                                   |
| <b>Melting Point:</b> 119°C (246°F)                                                   |
| <b>Vapor Density:</b> >1                                                              |
| <b>Solubility in Water (% by weight):</b> 45% at 0°C (Ammonium Sulphate)              |
| <b>Physical State and Appearance:</b> pale green prill (pellet or pastille in shape)  |
| <b>Odor threshold:</b> N/A                                                            |
| <b>Specific Gravity:</b> solid, 2.07 gm/ml                                            |
| <b>Vapor Pressure (mm Hg at 20°C):</b> Solid: Less than 0.0001 mm. Hg at 20°C (68° F) |
| <b>Volatiles by Volume:</b> N/A                                                       |
| <b>Evaporation Rate (Butyl Acetate=) (Ether=):</b> N/A                                |

| <b>Section V. Fire and Explosion Data</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>This Product is:</b> Not Combustible                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <b>Flash Points:</b> 188°C (370°F)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Flammable Limits:</b> LEL 35 gm/m <sup>3</sup><br>UEL 1400 gm/m <sup>3</sup> (dust)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Auto-Ignition temperature:</b> (374°F)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Basic Firefighting Procedures: * Fire Extinguishing Agents Recommendations</b><br><ol style="list-style-type: none"> <li>1. A fine water spray or fog is recommended</li> <li>2. CO<sub>2</sub> or dry chemical</li> <li>3. Small fires may be smothered with sand or soil sulphur</li> </ol>                                                                                                                                                                                                                                                                                                                                                         |
| <b>*Fire Extinguishing Agents to AVOID—Hoses and extinguishers with pressure streams should be avoided where solid sulphur is dusty or where it may create a further hazard by raising more dust clouds</b>                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>*Special Fire Fighting Precautions:</b> because burning sulphur evolves sulphur dioxide, breather apparatus or gas masks approved for use in acid-gas atmosphere should be used. Fumes from unprotected sulphur fires shall be avoided, if possible, by approaching for the upwind side.                                                                                                                                                                                                                                                                                                                                                              |
| <b>Fire degradation products:</b> Combustion may produce sulphur dioxide                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Flammability:</b> Condition to avoid: Heat, sparks, open flame, static electricity or any other potential ignition source should be avoided. Avoid contact with incompatible materials.                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Unusual fire and explosion hazards:</b> Dust suspended in air is readily ignited by flames, static electricity or friction spark. Every reasonable step must be taken to minimize dust formation. Dust tight castings should be equipped with explosion relief vents. Spark less electrical equipment is recommended. Handling equipment must be grounded or bonded to avoid static electricity. Keep away from source of flame or sparks. Detailed recommendations in Manufacturing Chemists Association SD-74 and National Safety Council 612 Bulletins covering “Sulphur” should be followed when handling TIGER 90CR <sup>®</sup> organic sulphur |

| <b>Section VI: Reactivity Information</b>                                 |
|---------------------------------------------------------------------------|
| <b>Stability:</b> Stable                                                  |
| <b>Conditions to avoid:</b> The main hazards are fire and dust explosions |
| <b>Hazardous Polymerization:</b> Will not occur                           |

## Section VII: Health Hazard Information & technology of Components

**Primary Routes of Entry:** Inhalation: Sulphur dust may irritate the mucous membranes of the respiratory passage  
Ingestions: Minimal toxicity, Irritating to mouth, throat and stomach. May cause digestive tract disorder/damage.  
Skin: Frequent or prolonged contact may irritate the skin. Low toxicity  
Eyes: sulphur dust is capable of irritating the inner surfaces of the eyelids.  
Permissible Concentration: None Established

**Toxicological Information:** Unusual Chronic Toxicity: N/A

## Section VIII: First Aid

**Eye Contact:** Irrigate thoroughly with copious quantities plain water

**Skin Contact:** Wash with mild soap and water

**Ingestion:** If swallowed, induce vomiting only if victim is conscious. DO NOT attempt to give anything by mouth to an unconscious person.

## Section IX: Precautionary Measures:

**Respiratory Protection:** Dust-type respirators shall be provided for dusty conditions. Breathing apparatus must be available for emergency use in case of fire.

**Eye & Face Protection:** Dust-tight goggles with plastic or rubber frames may be helpful in dusty conditions.

**Hands, Arms and Body Protection:** Workers whose skin may be sensitive to sulphur dust should button collars, roll sleeves down, and gather trousers at the ankle. Gloves may be helpful.

**Other Clothing and Equipment:** Hard hat and safety shoes. Fire-retardant fabrics is recommended. Sulphur impregnated clothing should not be worn.

**Storage:** Solid becomes corrosive to metals when stored wet. Sulphur/bentonite fertilizer will physically break down when exposed to moisture or water.

**Ventilation:** Local exhaust if dusty conditions prevail

**Normal Handling:** Avoid breathing dust and keep clothing as free from dust as possible.

**Spill or Leak:** Shovel into disposal containers to cover with tarp. For landfill disposal, mix with limestone 3 times the weight of sulphur

**Special Precautions/Procedures/Label Instructions:** Eye wash equipment near the work area.