

# **Safety Data Sheet**

# Tiger 90CR® Organic Sulphur

# **SECTION 1. IDENTIFICATION**

**Product Identifier** Tiger 90CR® Sulphur

Other Means of Identification

Granular Sulphur, T-90

**Recommended Use** Plant nutrient fertilizer.

**Restrictions on Use** Always follow safe handling practices.

Identifier

Manufacturer/Supplier Tiger-Sul Products LLC -Hwy 31 West Industrial Park P.O. Box 5; Atmore, AL; 36504, USA.,

Tiger-Sul Products LLC -61 Stork Rd; Stockton, CA; 95203, USA.

Tiger-Sul (Canada) Co, -275137 Range Road 263 P.O. Box 126; Irricana, AB; T0M 1B0,

Canada.

Emergency Phone No. CHEMTREC, (800) 424-9300 -24 hrs

Irricana Toll free, (877) 299-3399 Atmore Toll free, (800) 239-3647 Stockton Toll free, (877) 299-3399

# **SECTION 2. HAZARD IDENTIFICATION**

Classified according to Canada's Hazardous Products Regulations (WHMIS 2015) and the US Hazard Communication Standard (HCS 2012).

#### Classification

Combustible dust - Category 1; Acute toxicity (Dermal) - Category 4; Skin irritation - Category 2; Eye irritation -Category 2A; Skin sensitization - Category 1B; Carcinogenicity - Category 1A

# **Label Elements**





# **Danger**

May form combustible dust concentrations in air.

May cause cancer.

Causes skin and eye irritation.

May be harmful if swallowed, in contact with skin or if inhaled.

Other Hazards None known.

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## **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

#### Mixture:

Chemical Name	CAS No.	%	Other Identifiers	Other Names
SULFUR	7704-34-9	89 - 91	EU EINECS/ELINCS Number: 231-722-6	S
BENTONITE	1302-78-9	9 - 11	EU EINECS/ELINCS Number: 215-108-5	CLAY
SILICA, QUARTZ	14808-60-7	0.28 - 0.35	EU EINECS/ELINCS Number: 238-878-4	SiO2

## SECTION 4. FIRST-AID MEASURES

#### **First-aid Measures**

#### Inhalation

Take precautions to ensure your own safety before attempting rescue (e.g. wear appropriate protective equipment). Remove source of exposure or move to fresh air.

#### **Skin Contact**

Avoid direct contact. Wear chemical protective clothing if necessary. Take off contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Wash gently and thoroughly with lukewarm, gently flowing water and mild soap for 5 minutes.

## **Eye Contact**

Wear eye protection to avoid dust getting into eyes. If contact and irritation occurs rinse the contaminated eye(s) with lukewarm, gently flowing water for 5 minutes, while holding the eyelid(s) open. Remove contact lenses, if present and easy to do.

#### **First-aid Comments**

Get medical advice or attention if you feel unwell or are concerned.

#### Most Important Symptoms and Effects, Acute and Delayed

If in eyes: may cause moderate to severe irritation. Symptoms include sore, red eyes, and tearing.

If on skin: may cause mild to moderate irritation

If inhaled: repeated or long term inhalation can cause respiratory problems (SILICA,QUARTZ).

#### **Immediate Medical Attention and Special Treatment**

# **Target Organs**

None known.

## **Special Instructions**

Treat symptomatically.

# **SECTION 5. FIRE-FIGHTING MEASURES**

# **Extinguishing Media**

## Suitable Extinguishing Media

Water spray or fog is preferred If water is not available, use Carbon dioxide, dry chemical powder or appropriate foam. Small fires may be smothered with sand.

#### **Unsuitable Extinguishing Media**

Avoid scattering spilled material with high pressure water streams.

## **Specific Hazards Arising from the Product**

Combustible dust. Powder may form explosive dust-air mixture.

Combustion products include Sulphur Dioxide and Hydrogen Sulphide.

# Special Protective Equipment and Precautions for Fire-fighters

Wear positive pressure self-contained breathing apparatus (SCBA) Structural firefighters' protective clothing will only provide limited protection.

Chemical protective clothing (e.g. chemical splash suit) and positive pressure SCBA may be necessary. Hydrogen Sulphide is heavier than air and may collect in low lying areas and confined spaces.

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# SECTION 6. ACCIDENTAL RELEASE MEASURES

#### Personal Precautions, Protective Equipment, and Emergency Procedures

Do not touch damaged containers or spilled product unless wearing appropriate protective equipment.

Use the personal protective equipment recommended in Section 8 of this safety data sheet.

#### **Environmental Precautions**

Prevent uncontrolled release to the environment.

# Methods and Materials for Containment and Cleaning Up

Avoid generating dust.

Avoid dry sweeping.

If necessary, use a dust suppressant such as water.

Do not use compressed air for clean-up.

## **SECTION 7. HANDLING AND STORAGE**

## **Precautions for Safe Handling**

Avoid breathing in this product.

Avoid repeated or prolonged skin contact.

Do not get in eyes.

#### **Conditions for Safe Storage**

Store in an area that is: cool, well-ventilated, out of direct sunlight and away from heat and ignition sources.

# SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### **Control Parameters**

	ACGIH TLV®		OSHA PEL		AIHA WEEL	
Chemical Name	TWA	STEL	TWA	Ceiling	8-hr TWA	TWA
SULFUR	10 mg/m3		15 mg/m3			
BENTONITE	1 mg/m3	10 mg/m3				
SILICA, QUARTZ	0.025 mg/m3		10 mg/m3			

## **Appropriate Engineering Controls**

Do not allow product to accumulate in the air in work or storage areas, or in confined spaces.

Use local exhaust ventilation, if general ventilation is not adequate to control amount in the air.

Provide eyewash in work area, if contact or splash hazard exists.

# **Individual Protection Measures**

#### **Eye/Face Protection**

Wear chemical safety goggles.

#### **Skin Protection**

Wear long sleeved clothing and impervious gloves.

## **Respiratory Protection**

For non-routine or emergency situations: wear a NIOSH approved self-contained breathing apparatus (SCBA) or supplied air respirator.

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# SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

**Basic Physical and Chemical Properties** 

Appearance Greenish-tan pastilles. Particle Size: 280SGN

Odour Not applicable
Odour Threshold Not applicable
pH Not available

Melting Point/Freezing Point 115 °C (239 °F) (SULFUR) (melting); Not applicable (freezing)

Initial Boiling Point/Range Not applicable

Flash Point 207 °C (405 °F) (closed cup) (SULFUR)

**Evaporation Rate** Not applicable

Flammability (solid, gas) Flammable solid. (SULFUR)

Upper/Lower Flammability or 0.14% (SULFUR) (upper); 0.0035% (SULFUR) (lower)

**Explosive Limit** 

Vapour PressureNot applicableVapour Density (air = 1)Not applicableRelative Density (water = 1)Not applicable

**Solubility** Insoluble in water; Not available (in other liquids)

Partition Coefficient, Not applicable

n-Octanol/Water (Log Kow)

Auto-ignition Temperature 232 °C (450 °F) (SULFUR)

**Decomposition Temperature** Not available

Viscosity Not applicable (kinematic); Not applicable (dynamic)

Other Information

Physical State Solid

Bulk Density 68 lb/ft3

Vapour Pressure at 50 deg C Not applicable

# **SECTION 10. STABILITY AND REACTIVITY**

#### Reactivity

Not reactive under normal conditions of use.

## **Chemical Stability**

Normally stable.

# **Possibility of Hazardous Reactions**

None expected under normal conditions of storage and use.

Reacts in the presence of high energy sources (e.g. welding arcs).

Dust may cause a fire or explosion.

## **Conditions to Avoid**

Open flames, sparks, static discharge, heat and other ignition sources.

#### **Incompatible Materials**

Oxidizing agents (e.g. peroxides).

# **Hazardous Decomposition Products**

Sulphur Dioxide: Hydrogen Sulfide.

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# **SECTION 11. TOXICOLOGICAL INFORMATION**

#### **Likely Routes of Exposure**

Inhalation; eye contact; skin contact.

**Acute Toxicity** 

Chemical Name	LC50	LD50 (oral)	LD50 (dermal)
SULFUR	> 0.047 mg/L (rat) (4-hour exposure)	> 5000 mg/kg (rat)	
BENTONITE		5000 mg/kg (rat)	
SILICA, QUARTZ		500 mg/kg (rat	

0% of the mixture consists of ingredients of unknown toxicity 1222 mg/kg Acute Dermal Toxicity Estimate

#### Skin Corrosion/Irritation

May cause irritation to skin, eyes and respiratory tract.

# Serious Eye Damage/Irritation

Can cause serious eye irritation.

## STOT (Specific Target Organ Toxicity) - Single Exposure

#### Inhalation

May cause nose and throat irritation.

## **Skin Absorption**

May cause skin to become sensitive to sunlight (ultraviolet light).

#### Ingestion

May be harmful If large amounts are swallowed symptoms may include nausea, vomiting, stomach cramps and diarrhea.

**Aspiration Hazard** Not known to be an aspiration hazard.

## STOT (Specific Target Organ Toxicity) - Repeated Exposure N.AV.

If inhaled: lung injury, irritation of the respiratory system. May cause respiratory tract injury.

#### Respiratory and/or Skin Sensitization

May cause an allergic reaction (skin sensitization) based on limited evidence.

## Carcinogenicity

If inhaled: lung cancer. A1 – Confirmed human carcinogen. (SILICA, QUARTZ)

## **Reproductive Toxicity**

**Development of Offspring** No information was located.

Sexual Function and Fertility No information was located.

Effects on or via Lactation No information was located.

Germ Cell Mutagenicity No information was located.

Interactive Effects No information was located.

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# SECTION 12. ECOLOGICAL INFORMATION

Avoid uncontrolled release.

## **Ecotoxicity**

**Acute Aquatic Toxicity** 

Chemical Name	LC50 Fish	EC50 Crustacea	ErC50 Aquatic Plants	ErC50 Algae
SULFUR	< 14 mg/L (Lepomis macrochirus (bluegill); 96- hour; fresh water; static)	> 5000 mg/L (Daphnia magna (water flea); 48-hour; fresh water; static)	Not available	Not available
BENTONITE	19000 mg/L (Oncorhynchus mykiss (rainbow trout); 96- hour; fresh water; static)	Not available	Not available	Not available

# **Chronic Aquatic Toxicity**

Chemical Name	NOEC Fish	EC50 Fish	NOEC Crustacea	EC50 Crustacea
BENTONITE	Not available	Not available	Not available	Not available

# **Persistence and Degradability**

No ingredient of this product or its degradation products is known to be highly persistent.

#### **Bioaccumulative Potential**

This product and its degradation products are not known to bioaccumulate.

# **Mobility in Soil**

If released into the environment, this product is expected to move slowly through the soil, based on physical and chemical properties.

#### **Other Adverse Effects**

There is no information available.

# **SECTION 13. DISPOSAL CONSIDERATIONS**

## **Disposal Methods**

Dispose of contents and container in accordance with local, regional, national and international regulations.

# **SECTION 14. TRANSPORT INFORMATION**

Not regulated under Canadian TDG regulations. Not regulated under US DOT Regulations.

Environmental Not applicable

Hazards

Special Precautions Not applicable

## Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

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# **SECTION 15. REGULATORY INFORMATION**

#### Safety, Health and Environmental Regulations

#### Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all of the information required by the Controlled Products Regulations.

Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL)

Listed on the DSL.

#### USA

## Toxic Substances Control Act (TSCA) Section 8(b)

All ingredients are listed on the TSCA Inventory.

## **Additional USA Regulatory Lists**

Listed Pennsylvania Right To Know. (SULFUR) (QUARTZ).

MARNING: This product can expose you to chemicals including crystalline silica, which is known to the State of California to cause cancer when inhaled. For more information, go to <a href="www.P65Warnings.ca.gov">www.P65Warnings.ca.gov</a>.

This product does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355).

# **SECTION 16. OTHER INFORMATION**

NFPA Rating Health - 1 Flammability - 1 Instability - 0

Based on SULFUR

SDS Prepared By Tiger-Sul (877) 299-3399

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Revision Indicators The following SDS content was changed on 12/18/2018: Updated California Proposition 65

statement; Added EU EINECS/ELINCS Numbers...

Key to Abbreviations ACGIH® = American Conference of Governmental Industrial Hygienists

NFPA = National Fire Protection Association NIOSH = National Institute for Occupational

Safety and Health

OSHA = US Occupational Safety and Health Administration

Disclaimer This Safety Data Sheet is offered solely for information, consideration, and investigation

purposes. It is not to be construed as recommending any practice or product in violation of any law or regulation. The user is responsible to determine the suitability of the material for use and practice necessary safety precautions. The information presented has been compiled from sources considered to be dependable and is reliable to the best of our knowledge and is not to

be considered as a warranty or quality specification.



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