



# MSDS – Material Safety Data Sheet



## Iron Oxide - H<sub>2</sub>S Scavenger

### 1: Product and Company Identification

**Product Name:** Iron Oxide H<sub>2</sub>S Scavenger  
**Appearance:** Rust colored pellets  
**Trade Name:** cg4  
**Emergency Phone:** 206-780-5634 206-780-1340

**Manufacturer's Name & Address:**  
SCC&PT Development Company  
c/o ACP Technologies Inc.  
710 John Nelson Lane NE, Bainbridge Island, WA 98110

### 2: Composition / Information On Ingredients

<u>Chemical Name:</u>		<u>CAS Number:</u>	<u>Composition:</u>
Iron Oxide	Fe <sub>2</sub> O <sub>3</sub>	1309-37-1	60%
Calcium Sulfate Dihydrate	CaSO <sub>4</sub> ·2H <sub>2</sub> O	10101-41-4	28%
Ammonium Sulfate	(NH <sub>4</sub> ) <sub>2</sub> SO <sub>4</sub>	7783-20-2	9%
Other oxides	each less than 1%	N/A	3%

### 3: Hazard Identification

**Harmful if inhaled. Affects respiratory system. May cause irritation to skin, eyes, and respiratory tract.**

**Flammability:** None

**Lab Protective equipment:** Goggles, Lab Coat, Gloves

#### Potential Health Effects

**Eyes:** May cause mechanical irritation.

**Ingestion:** Extremely large oral dosages may cause gastrointestinal disturbance.

**Inhalation:** May cause irritation to the respiratory tract. Symptoms may include coughing and shortness of breath.

**Contact with skin:** Contact with skin normally has no effect. May cause irritation on hypersensitive skin.

**Chronic:** Long term inhalation exposure to iron has resulting in mottling of the lungs, a condition referred to as siderosis. This is considered a benign pneumoconiosis and does not ordinarily cause significant physiological impairment. Long term eye exposure may stain the eye and leave a rust ring.

**Aggravation of Pre-existing conditions:** Persons with impaired respiratory function may be more susceptible to the effects of cg4.

### 4: First Aid Measures

**Inhalation:** Remove to fresh air. Get medical attention for any breathing difficulty.

**Ingestion:** If large amounts are swallowed, drink water and get medical advice.

**Eye Contact:** Immediately flush eyes with water for at least 15 minutes, lifting upper and lower eyelids occasionally. Get medical attention if irritation persists.

**Skin Contact:** Wash exposed areas with soap and water. If irritation develops, get medical attention.

### 5: Fire Fighting Measures

**Fire:** Not a fire hazard

**Explosion, Flash Point, Auto Ignition:** N/A

**Special Fire Fighting Procedures:** None. Use any means suitable for extinguishing surrounding fire. In the event of a fire, wear full protective clothing and NIOSH approved self contained breathing apparatus with full facepiece operated in positive pressure mode.

## 6: Accidental Release Measures

**Spill Response Procedures:** Ventilate area of spill. Wear personal protective equipment as specified.  
Minimize dust as material is gathered.

**Recommended Methods of Disposal:** Dispose or reclaim all waste in a suitable container and in accordance with applicable government regulations.

*If material is saturated with Hydrogen Sulfide, please review separate handling instructions.*

## 7: Handling and Storage

**Storage:** Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Empty containers may retain this material and may therefore be hazardous. Observe all warnings and precautions listed for the product.

## 8: Exposure Control / Personal Protection

**Airborne Exposure Limits:** OSHA Permissible Exposure Limit for Iron Oxide fume is 10 mg/m<sup>3</sup>

**Ventilation & Engineering Controls:** Local exhaust is generally preferred, as it prevents dispersion of dust into the general work area.

**Personal Respirators:** If exposure limit is exceeded, a half-face dust/mist respirator may be worn (NIOSH Approved Type N95 or better). For emergencies or where exposure is extreme, a full facepiece positive-pressure air supplied respirator should be used.

**Skin Protection:** Wear protective gloves and clean body covering clothing.

**Eye Protection:** Use safety goggles.

## 9: Physical and Chemical Properties

**Appearance:** Rust colored iron oxide pellets

**Odor:** none

**pH:** N/A

**Initial boiling point and boiling range:** N/A

**Evaporation rate:** N/A

**Size of cg4 pellet:** 4mm round X 5 to 10 mm random length

**Flammable:** No

**Melting/freezing point:** N/A

**Flash point:** N/A

**Specific gravity:** 1.1

## 10: Stability and Reactivity

**Stability:** Stable under normal storage conditions

**Conditions to Avoid:** N/A

**Incompatibility:** Carbon Monoxide, Hydrazine, Calcium Hypochloride, Performic Acid, Bromine Pentafluoride

**Hazardous decomposition products:** None

**Hazardous polymerization:** Will not occur.

*Spent cg4 will likely contain materials that make the material flammable and/or conducive to self-heating.*

## 11: Toxicological Information

See Section 3 and 4.

## 12: Ecological Information

No information known.

### 13: Disposal Considerations

This material may be disposed in an appropriate and approved waste disposal facility.

Spent (used) material has different characteristics and disposal is regulated differently by state and local authorities. Material saturated with H<sub>2</sub>S is black in color and is pyrophoric. It must be soaked with water and transformed into a liquid (slurry) format when it first comes into contact with air to prevent self-heating and combustion. Spent material will oxidize as it is exposed to air and as it dries. As it dries, it should be continually turned or stirred to eliminate rapid oxidation (and combustion). The slurry may be spread, to a thickness not to exceed three inches, on a non-combustible surface and without contact or proximity to combustible material. If any area of the spread material reaches heat above 120 degrees Fahrenheit, the material must be rewetted and/or turned. The spent material will turn back to a rust color when it is fully oxidized and no longer pyrophoric. This fully oxidized material must be disposed of at an approved facility or in an appropriate manner in accordance with local regulations.

### 14: Transport Information

Not regulated.

### 15: Regulatory Information

Iron Oxide	Fe <sub>2</sub> O <sub>3</sub>	1309-37-1	60%	
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Other oxides	each less than 1%	N/A	3%	
<b>TSCA:</b>	Yes		<b>CERCLA 261.33</b>	No
<b>SARA 313 Report:</b>	Not required		<b>EPCRA</b>	Not listed

### 16: Other Information

#### NFPA Ratings;

Health	1	Flammability	0	Reactivity	0
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Since material is transported in bulk bags and not individually labeled, distributor must provide MSDS with all shipments.

#### Disclaimer:

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