



## SAFETY DATA SHEET HGS-85 ES

### SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Chemical Name : HGS-85 ES Fertilizer (Granular)  
Chemical Formula : 85% (Sulphur Molecular Weight: N/A)  
11% Bentonite Clay  
4% Potassium Humate  
Synonyms : HGS-85 ES  
General Use : Fertilizer (as soil application)  
Manufacturer's Name : Sohar Sulphur Fertilizers L.L.C  
Address : Plot 5205, Suhar Industrial City,  
Suhar, Sultanate of Oman  
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Email : [info@ssfoman.om](mailto:info@ssfoman.om)  
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### SECTION 2 - COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	%	Other Identifiers	Other Names
SULFUR	7704-34-9	85	EU EINECS/ELINCS Number: 231-722-6	S
BENTONITE	1302-78-9	11	EU EINECS/ELINCS Number: 215-108-5	CLAY
HUMIC ACID	0068514-28-3	4	EU EINECS/ELINCS Number: n/a	Potassium Humate

### SECTION 3 - HAZARDS 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.  
Causes skin and eye irritation.



May be harmful if swallowed, in contact with skin or if inhaled.  
Other Hazards None known.

#### **SECTION 4 - FIRST AID MEASURES**

- Eyes** : Wear eye protection to avoid dust getting into the eyes. If contact and irritation occur 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.
- Skin** : 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.
- Inhalation** : Take precautions to ensure your own safety before attempting rescue (e.g. wear appropriate protective equipment).  
Remove the source of exposure or move to fresh air.
- Ingestion** : If swallowed, induce vomiting only if the victim is conscious. **DO NOT** attempt to give anything by mouth to an unconscious person
- 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 soreness, red eyes, and tearing.  
If on the skin: may cause mild to moderate irritation
- Immediate Medical Attention and Special Treatment**
- Target Organs**  
None known.
- Special Instructions**  
Treat symptomatically.

#### **SECTION 5 - FIREFIGHTING 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. The powder may form an explosive dust-air mixture.

Combustion products include Sulphur Dioxide and Hydrogen Sulfide.

##### **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 Sulfide is heavier than air and may collect in low lying areas and confined spaces.

## SECTION 6 - ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment, and Emergency Procedures

Do not touch damaged containers or spilled products 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

Handling Avoid breathing in this product.

Precautions Avoid repeated or prolonged skin contact.

Do not get in eyes

Storage Store in an area that is: cool, well-ventilated, out of direct sunlight and away from

Requirements heat and ignition sources.

## SECTION 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Chemical Name	ACGIH TLV®		OSHA PEL		AIHA WEEL	
	TWA	STEL	TWA	Ceiling	8-hr TWA	TWA
SULFUR	10 mg/m <sup>3</sup>	N.AV.	15 mg/m <sup>3</sup>	N.AV.	N.AV.	N.AV.
BENTONITE	1 mg/m <sup>3</sup>	10 mg/m <sup>3</sup>	N.AV.	N.AV.	N.AV.	N.AV.
HUMIC ACID	N.AV.	N.AV.	N.AV.	N.AV.	N.AV.	N.AV.

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.

## SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Basic Physical and Chemical Properties



Appearance : Green-yellow pastilles. Particle Size: 280SGN  
 Odor : Not applicable  
 Odor Threshold : Not applicable  
 pH : Not available  
 Melting Point/Freezing Point : 115 °C (239 °F) (SULFUR) (melting); Not applicable (freezing)  
 Boiling Point : Not applicable  
 Flash Point : 207 °C (405 °F) (closed cup) (SULFUR)  
 Evaporation Rate : Not applicable  
 Flammability (solid, gas) : Flammable solid. (SULFUR)  
 Upper/Lower Flammability : 0.14% (SULFUR) (upper); 0.0035% (SULFUR) (lower)  
 Vapor Pressure : Not applicable  
 Vapor Density (air = 1) : Not applicable  
 Relative Density (water = 1) : Not applicable  
 Solubility : Insoluble in water; Not available (in other liquids)  
 Partition Coefficient, Not applicable n-Octanol/Water (Log Kow) : Not applicable  
 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 : 68.5 lb/ft<sup>3</sup>  
 Vapor 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.

### 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)	N.A.V.
BENTONITE	N.A.V.	5000 mg/kg (rat)	N.A.V.
HUMIC ACID	N.A.V.	500 mg/kg (rat)	N.A.V.

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 : Inhalation
- Toxicity) - Single Exposure : May cause nose and throat irritation.
- Skin Absorption : May cause the 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 : N.AV.
- Toxicity) - Repeated Exposure : If inhaled: lung injury, irritation of the respiratory system. May cause respiratory tract injury.
- Respiratory and/or Skin : May cause an allergic reaction (skin sensitization) based on limited
- Sensitization : evidence.
- Carcinogenicity : Development of Offspring: No information was located.
- Reproductive Toxicity : 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

## 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; freshwater; static)	>5000 mg/L (Daphnia magna (water flea); 48-hour; freshwater; static)	N.AV.	N.AV.
BENTONITE	19000 mg/L (Oncorhynchus mykiss (rainbow trout); 96-hour; freshwater; static)	N.AV.	N.AV.	N.AV.

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.





**Bio-accumulative 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 : Dispose of contents and contains 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 Hazards : Not applicable

Special Precautions : Not applicable

Transport in Bulk According to Annex II of MARPOL 73/78 and the IBC Code : Not applicable

**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**

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**

Prepared by : QHSE DEPT



Disclaimer

- : This MSDS and the information it contains are offered to you in good faith as accurate. We believe that the information is correct but cannot guarantee its accuracy or completeness. Health and safety precautions in this data sheet may not be adequate for all individuals and/or situations. It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. The statement made in this data sheet shall be construed as a permission or recommendation for the use of any product that might infringe existing patents.

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.