

**Sulfur, prilled**

Version 2.0

Revision Date 2010-06-28

**1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING****Product information**

Trade name : Sulfur, prilled  
 Use : Intermediate

Local : Qatar Chemical Company LTD  
 1st Floor Salam Tower Al Corniche  
 P.O. Box 24646  
 Doha, Qatar

MSDS Requests: (+974) 484-7110  
 Technical Information: (+974) 484-7110  
 Email: CPCRAMSDSREQUES@cpchem.com

**Emergency telephone:****Health:**

866.442.9628 (North America)  
 1.832.813.4984 (International)

**Transport:**



North America: CHEMTREC 800.424.9300 or 703.527.3887  
 ASIA: +1.703.527.3887  
 EUROPE: BIG +32.14.584545 (phone) or +32.14583516 (telefax)  
 South America SOS-Cotec Inside Brazil: 0800.111.767 Outside Brazil: +55.19.3467.1600

Responsible Department : Product Safety and Toxicology Group  
 E-mail address : MSDS@CPChem.com  
 Website : www.CPChem.com

**2. HAZARDS IDENTIFICATION****GHS-Classification**

: Flammable solids, Category 2  
 Eye irritation, Category 2A  
 Skin irritation, Category 2  
 Skin sensitization, Category 1

**GHS-Labeling**

Symbol(s) :  

Signal word : Warning

Hazard statements : H228: Flammable solid.  
 H315: Causes skin irritation.  
 H317: May cause an allergic skin reaction.

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H319: Causes serious eye irritation.

Precautionary statements : **Prevention:**  
 P210 Keep away from heat/sparks/open flames/hot surfaces.  
 - No smoking.  
 P240 Ground/bond container and receiving equipment.  
 P241 Use explosion-proof electrical/ventilating/lighting/equipment.  
 P261 Avoid breathing dust/fume/gas/mist/vapors/spray.  
 P264 Wash face, hands and any exposed skin thoroughly after handling.  
 P272 Contaminated work clothing should not be allowed out of the workplace.  
 P280 Wear protective gloves/protective clothing/eye protection/face protection.  
**Response:**  
 P302 + P352 IF ON SKIN: Wash with plenty of soap and water.  
 P304 + P312 IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell.  
 P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 P312 Call a POISON CENTER or doctor/physician if you feel unwell.  
 P321 Specific treatment (see supplemental first aid instructions on this label).  
 P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.  
 P337 + P313 If eye irritation persists: Get medical advice/attention.  
 P362 Take off contaminated clothing and wash before reuse.  
 P370 + P378 In case of fire: Evacuate area. Use manufacturer/supplier or the competent authority to specify appropriate media for extinction.  
**Disposal:**  
 P501 Dispose of contents/container to an approved waste disposal plant.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Synonyms : Prilled

Molecular formula : S

Chemical Name	CAS-No. / EINECS-No.	Concentration[%]
Sulfur	7704-34-9 / 231-639-5	100

**4. FIRST AID MEASURES**

General advice : Move out of dangerous area. Show this material safety data sheet to the doctor in attendance. Do not leave the victim unattended.

Inhalation : If unconscious place in recovery position and seek medical advice. If symptoms persist, call a physician.

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- Skin contact : If skin irritation persists, call a physician. If on skin, rinse well with water. If on clothes, remove clothes.
- Eye contact : Immediately flush eye(s) with plenty of water. Remove contact lenses. Protect unharmed eye. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.
- Ingestion : Keep respiratory tract clear. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.

**5. FIRE-FIGHTING MEASURES**

- Flash point : 207 °C (405 °F)
- Autoignition temperature : 232 °C (450 °F)
- Unsuitable extinguishing media : High volume water jet.
- Special protective equipment for fire-fighters : Wear self contained breathing apparatus for fire fighting if necessary.
- Further information : For safety reasons in case of fire, cans should be stored separately in closed containments. Use a water spray to cool fully closed containers.
- Hazardous decomposition products : Sulfur oxides.

**6. ACCIDENTAL RELEASE MEASURES**

- Personal precautions : Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Remove all sources of ignition.
- Environmental precautions : Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.
- Methods for cleaning up : Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.

**7. HANDLING AND STORAGE****Handling**

- Advice on safe handling : Avoid formation of respirable particles. Do not breathe vapors/dust. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should

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be prohibited in the application area. Open drum carefully as content may be under pressure. Dispose of rinse water in accordance with local and national regulations. Persons susceptible to skin sensitization problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.

Advice on protection against fire and explosion : Avoid dust formation. Provide appropriate exhaust ventilation at places where dust is formed. Keep away from open flames, hot surfaces and sources of ignition.

**Storage**

Requirements for storage areas and containers : No smoking. Keep container tightly closed in a dry and well-ventilated place. Electrical installations / working materials must comply with the technological safety standards.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Personal protective equipment**

Hand protection : The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection : Eye wash bottle with pure water. Tightly fitting safety goggles. Wear face-shield and protective suit for abnormal processing problems.

Skin and body protection : Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene measures : When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

**9. PHYSICAL AND CHEMICAL PROPERTIES****Appearance**

Physical state : Solid

Color : Yellow

**Safety data**

Flash point : 207 °C (405 °F)

Lower explosion limit : No data available

Upper explosion limit : No data available

Oxidizing properties : No

Autoignition temperature : 232 °C (450 °F)

Molecular formula : S

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Molecular Weight	: 32,06 g/mol
pH	: Not applicable
Pour point	: No data available
Boiling point/boiling range	: 445 °C (833 °F)
Vapor pressure	: Not applicable
Density	: 2,1 g/cm <sup>3</sup>
Water solubility	: Negligible
Partition coefficient: n-octanol/water	: No data available
Viscosity, kinematic	: Not applicable
Relative vapor density	: 8,6 (Air = 1.0)
Evaporation rate	: No data available
Percent volatile	: No data available

**10. STABILITY AND REACTIVITY**

Conditions to avoid	: Heat, flames and sparks.
Other data	: This material is considered stable under normal ambient and anticipated storage and handling conditions of temperature and pressure. No decomposition if stored and applied as directed.

**11. TOXICOLOGICAL INFORMATION**

<b>Product</b>	
Acute oral toxicity	: LD50: > 2.000 mg/kg Species: rat
<b>Product</b>	
Acute inhalation toxicity	: LC50: > 9,23 mg/l Exposure time: 4 HR Species: rat
<b>Product</b>	
Acute dermal toxicity	: LD50: > 2.000 mg/kg Species: rat
<b>Skin irritation</b>	

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Sulfur : irritating

**Product**

Eye irritation : Eye irritation

**Product**

Sensitization : Causes sensitization.

**Repeated dose toxicity**

Sulfur : Species: rabbit  
 Application Route: Inhalation  
 Dose: 3.5, 10, 20 mg/kg  
 Exposure time: 20 day  
 NOEL: 20 mg/kg

**Product**

Aspiration toxicity : No aspiration toxicity classification.

**12. ECOLOGICAL INFORMATION****Toxicity to fish**

Sulfur : LC50: 866 mg/l  
 Exposure time: 96 HR  
 Species: Danio rerio (Zebra Fish)

**Elimination information (persistence and degradability)**

Biodegradability : Not applicable

**Further information on ecology**

Additional ecological information : No data available

**13. DISPOSAL CONSIDERATIONS**

Use material for its intended purpose or recycle if possible. This material, if it must be discarded, may meet the criteria of a hazardous waste as defined by US EPA under RCRA (40 CFR 261) or other State and local regulations. Measurement of certain physical properties and analysis for regulated components may be necessary to make a correct determination. If this material is classified as a hazardous waste, federal law requires disposal at a licensed hazardous waste disposal facility.

Product : Do not dispose of waste into sewer. Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company.

Contaminated packaging : Empty remaining contents. Dispose of as unused product. Do not re-use empty containers. Do not burn, or use a cutting torch on, the empty drum.

**14. TRANSPORT INFORMATION**

The shipping descriptions shown here are for bulk shipments only, and may not apply to shipments

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in non-bulk packages (see regulatory definition). Consult the appropriate domestic or international mode-specific and quantity-specific Dangerous Goods Regulations for additional shipping description requirements (e.g., technical name or names, etc.) Therefore, the information shown here, may not always agree with the bill of lading shipping description for the material. Flashpoints for the material may vary slightly between the MSDS and the bill of lading.

**USDOT**

NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

**IMO / IMDG**

NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

**IATA**

NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

**ADR**

NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

**RID**

NOT REGULATED AS A HAZARDOUS MATERIAL OR DANGEROUS GOODS FOR TRANSPORTATION BY THIS AGENCY.

## Additional Notes:

49 CFR 172.101, Special Provision 30 – Sulphur -- “Not Regulated if transported in nonbulk or formed into a shape for example prills, granules, pellets, pastilles or flakes...” IMO/IMDG Regulations: Sulphur is indicated in the IMDG Dangerous Goods List, Vol. 2, Chapter 3.2, special provision 242: "Sulphur is not subject to the provisions of this code when it has been formed into a specific shape (such as prills, granules, pellets, pastilles, or flakes)."

**15. REGULATORY INFORMATION****National legislation****Notification status**

Europe REACH	: On the inventory, or in compliance with the inventory
United States of America TSCA	: On the inventory, or in compliance with the inventory
Canada DSL	: On the inventory, or in compliance with the inventory
Australia AICS	: On the inventory, or in compliance with the inventory
New Zealand NZIoC	: On the inventory, or in compliance with the inventory
Japan ENCS	: On the inventory, or in compliance with the inventory
Korea KECI	: On the inventory, or in compliance with the inventory
Philippines PICCS	: On the inventory, or in compliance with the inventory
China IECSC	: On the inventory, or in compliance with the inventory

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**16. OTHER INFORMATION****Further information**

Legacy MSDS Number : QCHEM008

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

The above information is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made available subsequent to the date hereof may suggest modifications of the information, we do not assume any responsibility for the results of its use. This information is furnished upon condition that the person receiving it shall make his own determination of the suitability of the material for his particular purpose.