

Safety Data Sheet

COSAVET DF

Date: 10/09/2017

1. Identification of the substance/mixture and of the company/undertaking

Product name: COSAVET DF (Sulphur 80 % WG)
Other means of identification: EPA Reg. No. 70905-1
Recommended use of the chemical: Plant protection - agricultural pesticides uses as Fungicide
Manufacturer/Supplier
Company Name: Sulphur Mills Limited
Company Address: 604/605, 6th Floor,
349-Business Point
Western Express Highway,
Andheri (East), Mumbai - 400 069
India
Company Phone Number: Tel.: + 91 22 – 4345 2222
Fax: +91 22 – 4345 2245
Email: sml@sulphurmills.com
Emergency phone number: CHEMTREC: 1-800-424-9300

2. Hazard(s) identification

Classification of the substance or mixture

Not a Dangerous Substance according to GHS classification or other known OSHA hazards as noted in OSHA Communication Standard (HCS) (29 CFR 1910.1200).

Physical Hazards: Not classified

Label elements

Hazard Symbol: None required

Signal word: **WARNING**

Hazard statements: May be harmful if swallowed or inhaled. May be harmful in contact with skin. Causes eye irritation. Causes mild skin irritation.

Precautionary statements

Prevention: Avoid breathing dust/mist. Use only outdoors or in well ventilated areas. Wash thoroughly after handling. Wear protective gloves, clothing and eye/face protection. Do not eat, drink or smoke when using this product.

Response: **If inhaled:** Remove person to fresh air and keep comfortable for breathing.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical attention.
If on skin: Immediately wash with water and soap and rinse thoroughly. If skin irritation occurs, get medical advice/attention.
If swallowed: Call a Poison Center or doctor if you feel unwell.

Storage: Storage away from incompatible materials.

Disposal: Dispose of waste and residues in accordance with local authority requirement.

3. Composition/information on ingredients

Chemical characterization of substance

Chemical Name	CAS Number	Weight %
Sulphur	7704-34-9	80.00%

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4. First aid measures

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Oxygen or artificial respiration if needed. Call a POISON CENTER or doctor if you feel unwell.

Skin contact: Rinse with water. Get medical attention if irritation develops and persists.

Eye contact: Do not rub eyes. Rinse with water. Get medical attention if irritation develops and persists.

Ingestion: Rinse mouth. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed: Dusts may irritate the respiratory tract, skin and eyes.

Indication of immediate medical attention and special treatment needed: Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

General information: Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Firefighting measures

Extinguishing media

Suitable extinguishing media: CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

Unsuitable extinguishing media: Do not use water with full jet as it will spread the fire.

Specific hazards arising from the substance

Produces toxic sulfur dioxide gas.

Special protective equipment for fire-fighters

Wear suitable protective clothing to avoid contact with skin.

Wear self-contained respiratory protective device.

Additional information

Burns with a pale blue flame that may be difficult to see in daylight.

6. Accidental release measures

Personal precautions, protective equipment, and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Measures for environmental protection

Do not allow product to enter sewers, surface or ground water.

Methods and materials for containment and cleaning up

Pick up mechanically.

7. Handling and storage

Precautions for safe handling

Prevent formation of aerosols.

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Protect against electrostatic charges.
Keep ignition sources away.
Do not smoke.

Conditions for safe storage, including any incompatibilities

Store in cool, dry, well ventilated location. Store away from oxidizing materials like chlorates and nitrates. Do not store together with incompatible materials and foodstuffs. Preparations containing sulfur may react with metals including silver and copper, resulting in discoloration of the metal.

8. Exposure controls/personal protections

Occupational exposure limits

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Hygiene measures

Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work. Avoid contact with the eyes and skin.

Personal protective equipment:

Respiratory protection: Suitable respiratory protective device recommended.

Protection of hands:



Protective gloves.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Material of gloves: The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material cannot be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material: The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection: Safety glasses

Body protection: Protective work clothing

9. Physical and chemical properties

Appearance

Form:	Granulate
Colour:	Brown
Odour:	Sulphur like smell
Melting point/melting range:	Not determined
Boiling point/boiling range:	445°C
Flash point:	Not applicable
Ignition temperature:	260°C
Self-ignition:	Product not self-igniting
Danger of explosion:	Product does not present an explosion hazard
Density:	0.88 g/ml

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Solubility in/Miscibility with water: Insoluble
Solvent content: Organic: 0.00%, VOC (EC) 0.00%
Solid content: 100.00%
Additional Information: Critical Temp: 1,040°C
Critical Pressure: 11,800 kPa

10. Stability and reactivity

Possibility of hazardous reactions

Reacts violently with strong oxidants.

Conditions to avoid

Keep away from heat, air and moisture. Keep away from excess heat.

Incompatible materials

Incompatible with oxidizing materials.

Hazardous decomposition products

On combustion, forms toxic and corrosive gases of sulfur oxides, including sulfur dioxide.

11. Toxicological information

Acute toxicity:

LD/LC50 values relevant for classification:		
7704-34-9 sulphur		
Oral	LD 50	>5000 mg/kg (rat)
Dermal	LD 50	>2000 mg/kg (rat)
Inhalation	LC 50 (4 hr)	>2.63 mg/L in air (rat)

Skin corrosion/irritation: Non-irritant to skin

Serious eye damage/eye irritation: Non-irritating to eye

Skin Sensitization: No sensitizing effects known

Repeated dose toxicity

Species: Rat

Exposure period: 100 days

NOAEL: 56 mg/kg b.w

Result: No systemic effects were found.

CMR effects (carcinogenetic, Mutagenicity and toxicity for reproduction)

Mutagenicity: The substance was found to be non-mutagenic as per Ames test.

12. Ecological information

Practically non-toxic to Human and animal

Ecotoxicological effects:

7704-34-9 sulphur	
LC50(96hrs)	> 100 mg a.i./l (Brachydanio rerio (fish, freshwater)
LC50(48hrs)	>100mg/l (daphnia)
LD50	>2000 mg/kg (bobwhite quails)

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Additional ecological information:

General notes

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Results of PBT and vPvB assessment

No data available

13. Disposal considerations

Waste treatment methods

Product: Must not be disposed together with household garbage. Do not allow product to reach sewage system.

European waste catalogue: 20 01 19* pesticides

Contaminated packaging: Disposal must be made according to official regulations.

14. Transport information

State of product: Solid (granules)

ADR – Not regulated

IMDG – Not regulated

IATA – Not regulated

Granulated sulphur is not subject to the requirements of ADR, RID, IMO IMDG Code, IATA according to special provision 242 of UN Recommendations on the Transport of Dangerous Goods: Sulphur is not subject of ADR, RID, IMDG Code, IATA when it has been formed to a specific shape (such as prills, granules, pellets, pastilles or flakes)

15. Regulatory information

US federal regulations: This product is not a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate Hazard	- Yes
Delayed Hazard	- No
Fire Hazard	- Yes
Pressure Hazard	- No
Reactivity Hazard	- No

SARA 302 Extremely hazardous substance

Not listed.

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SARA 311/312 Hazardous chemical

No

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA)

Not regulated.

US state regulations

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed.

US. Massachusetts RTK - Substance List

Sulfur (CAS 7704-34-9)

US. New Jersey Worker and Community Right-to-Know Act

Sulfur (CAS 7704-34-9)

US. Pennsylvania Worker and Community Right-to-Know Law

Sulfur (CAS 7704-34-9)

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

16. Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Department issuing MSDS: Product safety department.

Issue Date: October 9, 2017

Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association"

(ICAO) GHS: Globally Harmonized System of Classification and Labelling of Chemicals

VOC: Volatile Organic Compounds

(USA, EU) LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent