

Material Safety Data Sheet

Product Name: COSAVET EDGE DF

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

· **Product name: COSAVET EDGE DF (Sulphur 80 % WG)**

· **Application of the substance / the preparation**

Plant protection - agricultural pesticide used as Fungicide / Miticide

· **Manufacturer/Supplier:**

Sulphur Mills Limited
604/605, 6th Floor,
349-Business Point Western Express Highway, Andheri (East),
Mumbai - 400 069,
India

· **Further information obtainable from:**

Tel.: + 91 22 4345 2222

Fax : +91 22 4345 2245

Email : sml@sulphurmills.com

2. Hazards identification

Inhalation - Sulphur dust may irritate the mucuous membrane of the respiratory passage.

Skin - In some individuals, Sulfur dust has an irritant action, which may be aggravated by perspiration or moisture.

Eyes – Sulphur dust causes mild irritation to eyes.

· **Precautionary statements**

P102 : Keep out of reach of children.

P270 : Do not eat, drink or smoke when using this product.

P501 : Dispose off contents/container in safe way.

3. Composition/information on ingredients

Ingredients	CAS No.	Content (% w/w)
1. Sulphur	7704-34-9	80.00
2. Other Ingredients		20.00

4. First aid measures

IF IN EYES: Hold eye open and rinse slowly and gently with water for 15–20 minutes.

Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a

Material Safety Data Sheet

Product Name: COSAVET EDGE DF

poison control centre or doctor for treatment advice.

IF ON SKIN OR CLOTHING : Take off contaminated clothing. Rinse skin immediately with plenty of water for 15–20 minutes. Call poison control centre or doctor for treatment advice.

IF SWALLOWED: Call a poison control centre or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give anything by mouth to an unconscious person.

IF INHALED: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control centre or doctor for further treatment advice.

Take container, label or product name and Pest Control Product Registration Number with you when seeking medical attention.

Antidotes: No antidotes, Treat symptomatically.

5. Fire fighting measures

Flash Point: 207 °C

Auto Ignition Temperature:

Dust Clouds - 190 °C (374 °F)

Undispersed Dust - 220 °C (428 °F)

Flammable Limits in Air:

Minimum explosion concentration is approximately 35gm per cu. metre (0.035 oz per cu. ft.) Maximum explosive concentration lies between 1000 and 2000 gm/m³ probably about 1400 gm/m³, (1.4 oz per cu. ft.)

Fire and Explosion Hazards:

Flammable solid. Dust suspended in air is readily ignited by flame, static electricity or friction spark. Every reasonable step must be taken to minimize dust formation. Handling equipment must be grounded or bonded to avoid static electricity. Keep away from sources of flame or sparks.

Fire Extinguishing Agents Recommended –

Fine water spray or fog, CO₂ or dry chemical powder. Small fires may be smothered with sand or solid sulfur.

Material Safety Data Sheet

Product Name: COSAVET EDGE DF

Fire Extinguishing Agents to Avoid -

Hoses and extinguishers with pressure streams should be avoided where solid sulfur is dusty or where it may create a further hazard by raising more dust clouds.

Special Fire Fighting Precautions -

Because burning sulfur evolves sulfur dioxide, breathing apparatus or gas masks approved for use in acid-gas atmosphere should be used. Fumes from unprotected sulfur fires shall be avoided if possible by approaching from the upwind side.

6. Accidental release measures

Eliminate all potential sources of ignition. Cover with damp inert material such as sand and sweep or vacuum up without generating dust. Shovel into labelled, sealed containers, bags or drums for disposal or reuse using a spark-free shovel. Equip clean up personnel with appropriate protective equipment and work upwind or increase ventilation.

7. Handling and storage

Store in original container in a cool, well -ventilated area away from sources of heat or ignition and out of direct sunlight. .

Keep containers tightly closed. Keep away from children.

Keep away from food stuffs, seed, herbicides and insecticides.

Wear protective equipments and clothing during use. Avoid skin and eye contact and inhalation of dust. Keep clothing as free from dust as possible.

8. Exposure controls/personal protections

· **Additional information about design of technical facilities:** No further data; see item 7.

· **Ingredients with limit values that require monitoring at the workplace:**

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

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Material Safety Data Sheet

Product Name: COSAVET EDGE DF

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.
· **Respiratory protection:** Suitable respiratory protective device recommended.

· **Protection of hands, eyes, body :**



Protective gloves

Wear goggles or a face shield, chemical-resistant gloves, a hat, a long-sleeved shirt, long pants and rubber boots during mixing/loading, application, clean-up and repair activities. For use in greenhouses, wear goggles or a face shield, a NIOSH-approved respirator, chemical-resistant gloves, a hat, a long-sleeved shirt, long pants and rubber boots during mixing/loading, application, clean-up and repair activities.

9. Physical and chemical properties

Physical state: Solid
Appearance: Brown coloured free flowing granules
Odour : Odourless
Solubility in water : Insoluble in water.
pH : 6.0 - 9.00
Suspensibility : 70% Min.

10. Stability and reactivity

Stability: Product is stable under normal conditions
Conditions to Avoid: The main hazards are heat, spark and open flame and dust explosions
Hazardous Polymerization: Will not occur
Materials to Avoid: Mixtures with chlorates, nitrates or other oxidizing agents may be explosive.
Sulphur will react with alkalies or alkaline earths.
Hazardous decomposition : burning may product toxic fumes, including oxides of sulphur.

11. Toxicological information

· **Acute toxicity:**

· **LD/LC50 values relevant for classification:**

7704-34-9 sulphur

Material Safety Data Sheet

Product Name: COSAVET EDGE DF

Oral	LD 50	> 5000 mg/kg (rat)
Dermal	LD 50	>2000 mg/kg (rat)
Inhalative	LC 50 (4 hr)	>2.63 mg/L in air (rat)

- **Primary irritant effect:**
- **on the skin:** non Irritant to skin
- **on the eye:** non irritating to eye
- **Sensitization:** No sensitizing effects known.

· **Additional toxicological information:**

· **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

· **Ecotoxic effects:**

7704-34-9 sulphur	
LC50(96hrs)	> 100 mg a.i./l (Brachydanio rerio(fish ,freshwater)
LC50(48hrs)	>100 mg/l (daphnia)
LD50	>2000 mg/kg (bobwhite quails)
EC50 (72 h)	> 100 mg/l (Algae)
LD50	>1000 mg/kg soil on dry wt basis (Earthworm)
LD50	>100 µg a.i./bee (Honey bee - Oral)
LD50	>100 µg a.i./bee (Honey bee - contact)

13. Disposal considerations

Local regulations should be adhered to. Incineration in controlled furnace. Destroy the empty containers in a safe and authorized place. If burnt avoid inhalation of smoke (if burning permitted). Never re-use empty packs.

Material Safety Data Sheet

Product Name: COSAVET EDGE DF

14. Transport information

Type of chemical : Sulphur- Non metallic form.

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

Hazard Symbol: None

Signal word: -----

· Hazard statements

None

· Precautionary statements

P102 : Keep out of reach of children.

P270 : Do not eat, drink or smoke when using this product.

P501 : Dispose off contents/container in safe way.

16. Other information

Disclaimer –

Information contained in this material safety data sheet is believed to be reliable but no representation; guarantee or warranties of any kind are made as to its accuracy, suitability for a particular application or results to be obtained from them. It is up to the user/distributor to ensure that the information contained in the material safety data sheet is relevant to the product manufactured/handled or sold by him as the case may be, *Sulphur Mills Ltd.* makes no warranties, expressed or implied, in respect of the adequacy of this document for any particular purpose.