

#### Technology leaders in advanced formulations



#### According to Commission Regulation (EC) No. 2015/830

#### COSAVET DF(Sulphur 80 WG)

Version: 5.0 Revision Date: 29.11.2021 This version replaces all previous versions.

# SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifier

Trade name: COSAVET DF (Sulphur 80 WG)

**CAS Number:** 7704-34-9 **EC number:** 231-722-6

# 1.2 Relevant identified uses of the substance or mixture and uses advised against Application of the substance / the mixture:

Plant protection - agricultural pesticide used as fungicide

#### 1.3 Details of the supplier of the safety data sheet Manufacturer/Supplier:

Sulphur Mills Limited 604/605, 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

#### 1.4 Emergency telephone number:

Tel.: + 91 22 - 4345 2222

#### **SECTION 2: Hazards identification**

# 2.1 Classification of the substance or mixture Classification according to Regulation (EC) No 1272/2008

Unclassified

#### 2.2 Label elements

#### Labelling according to Regulation (EC) No 1272/2008

The substance is classified and labelled according to the CLP regulation.

Hazard Statements: None

#### **Precautionary statements**

P101: If medical advice is needed, have product container or label at hand.

P102: Keep out of reach of children.

P103: Read label before use.

P264: Wash thoroughly after handling.

P280: Wear protective gloves.



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2.3 Other hazards

Results of PBT and vPvB assessment

**PBT:** Not applicable. **vPvB:** Not applicable.

#### **SECTION 3: Composition/information on ingredients**

#### 3.1 Chemical characterization/Substances

**Description** Mixture of substances listed below with nonhazardous additions.

Components

Chemical Name	Identification Numbers	Classification	Concentration
Sulfur	CAS No.: 7704-34-9 EC No.: 231-722-6	Skin Irritant 2, H 315	80%

#### **SECTION 4: First aid measures**

#### 4.1 Description of first aid measures

**General information:** Immediately remove any clothing soiled by the product. **After inhalation:** In case of unconsciousness place patient stably in side

position for transportation.

After skin contact: Immediately wash with water and soap and rinse thoroughly.

After eye contact: Rinse opened eye for several minutes under running water.

**After swallowing:** If symptoms persist consult doctor.

#### 4.2 Most important symptoms and effects, both acute and delayed

Early symptoms may be any combination of nausea, vomiting and irritation of eyes and bronchial tube if inhaled.

**Information for doctor:** Treat symptomatically and supportively.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

#### **SECTION 5: Firefighting measures**

#### 5.1 Extinguishing media

#### Suitable extinguishing agents:

CO<sub>2</sub>, powder or water spray. Fight larger fires with water spray or alcohol resistant foam. **For safety reasons unsuitable extinguishing agents:** Water with full jet

#### 5.2 Special hazards arising from the substance or mixture

Produces toxic sulfur dioxide gas

#### 5.3 Advice for firefighters

**Protective equipment:** 



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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.

#### **SECTION 6: Accidental release measures**

#### 6.1 Personal precautions, protective equipment and emergency procedures:

Wear protective equipment. Keep unprotected persons away.

#### **6.2 Environmental precautions:**

Do not allow to enter sewers/ surface or ground water.

6.3 Methods and material for containment and cleaning up: Pick up mechanically.

#### 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

### **SECTION 7: Handling and storage**

#### 7.1 Precautions for safe handling:

Prevent formation of aerosols.

#### Information about fire - and explosion protection:

Protect against electrostatic charges.

Keep ignition sources away - Do not smoke.

### 7.2 Conditions for safe storage, including any incompatibilities Storage:

#### Requirements to be met by storerooms and receptacles:

Store away from Oxidizing materials like chlorates, nitrates

Preparations containing sulfur may react with metals including silver and copper, resulting in discoloration of the metal.

#### Information about storage in one common storage facility:

Do not store together with incompatible materials and foodstuffs.

#### Further information about storage conditions:

Store in a cool, dry, well-ventilated area.

#### 7.3 Specific end use(s)

Used as fungicides.



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#### **SECTION 8: Exposure controls/personal protection**

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

#### 8.1 Control parameters

#### 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.

#### 8.2 Exposure controls

#### Personal protective equipment:

#### General protective and hygienic 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.

**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.

Due to missing tests no recommendation to the glove material can be given for the product/the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

#### 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

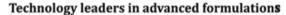
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

**Eye protection:** Safety glasses

**Body protection:** Protective work clothing

### **SECTION 9: Physical and chemical properties**







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#### 9.1 Information on basic physical and chemical properties

**General Information** Appearance: Solid Form: Granulate Colour: Brown Odour: Sulphur-like smell **Odour threshold:** Not applicable. pH-value: Not applicable. Change in condition Melting point/freezing point: Undetermined Initial boiling point and boiling range: 445 °C Flash point: Not applicable. Flammability (solid, gas): Not determined. **Auto-ignition temperature:** 246 °C **Explosive properties:** Product does not present an explosion hazard. **Explosion limits:** Lower: Not determined. Upper: Not determined. Vapor pressure: Not applicable. Density: 0.88 g/ml Relative density Not applicable. Vapor density Not applicable. **Evaporation rate** Not applicable. Solubility in / Miscibility with Water: Insoluble. Partition coefficient: n-octanol/water: Not applicable. Viscosity: Dynamic: Not applicable. Kinematic: Not applicable. Solvent content: Organic solvents: 0.00 % Solids content: 100.0 %

**9.2 Other information:** No further relevant information available.

#### **SECTION 10: Stability and reactivity**

**10.1 Reactivity:** See sub-sections below.

**10.2 Chemical stability:** Stable under recommended storage conditions.



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Version: 5.0 Revision Date: 29.11.2021 This version replaces

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#### Thermal decomposition / conditions to be avoided:

Keep away from excess heat

Keep away from heat, air and moisture.

10.3 Possibility of hazardous reactions: Reacts violently with strong oxidants.

**10.4 Conditions to avoid:** Avoid contact with incompatible materials

**10.5 Incompatible materials:** Incompatible with oxidizing materials.

10.6 Hazardous decomposition products:

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

#### **SECTION 11: Toxicological information**

#### 11.1 Information on toxicological effects

Acute toxicity based on available data; the classification criteria are not met.

LD/LC <sub>50</sub> values relevant for classification:			
Oral	LD <sub>50</sub>	>2000 mg/kg (rat)	
Dermal	LD <sub>50</sub>	>2000 mg/kg (rat)	
Inhalation	LC <sub>50</sub> 4 hr	>2.63 mg/L in air (rat)	

#### **Primary irritant effect:**

Skin corrosion/irritation

Non-Irritant to skin

Serious eye damage/irritation

Minimal irritant to eye

Respiratory or skin sensitization

No sensitizing effects known.

Repeated dose toxicity

Species: Rat

Exposure period: 100 days NOAEL: 56 mg/kg bw

Result: No systemic effects were found.

# CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction) Germ cell mutagenicity

**Mutagenicity:** The substance was found to be non-mutagenic as per Ames test. **Carcinogenicity:** Based on available data, the classification criteria are not met. **Reproductive toxicity:** Based on available data, the classification criteria are not met.

**STOT-single exposure**: No data available. **STOT-repeated exposure** No data available.

Aspiration hazard: No data available

#### **SECTION 12: Ecological information**



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#### 12.1 Toxicity

Eco toxicity:	
LC <sub>50</sub> (48hrs)	>100 mg/l (daphnia)
LC <sub>50</sub> (96hrs)	>100 mg/l ( <i>Danio rerio</i> (Fish, Freshwater))
EC <sub>50</sub> (72hrs)	>232 mg/l (green algae)
LD <sub>50</sub> LD <sub>50</sub> (48hrs)	>2000 mg/kg (bobwhite quails) > 100 µg formulation/bee (honeybee oral & contact)

#### 12.2 Persistence and degradability

**Components: Sulfur** 

Biodegradability:

Result: Not Applicable as substance is inorganic.

#### 12.3 Bio accumulative potential

**Components: Sulfur** 

Bioaccumulation

Result: Not applicable as substance is inorganic.

## 12.4 Mobility in soil Components: Sulfur

Result: Not applicable as substance is inorganic

#### 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.

#### 12.5 Results of PBT and vPvB assessment

**PBT:** Not applicable. **vPvB:** Not applicable.

**12.6 Other adverse effects:** No further relevant information available.

#### **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

#### Recommendation:

Dispose off waste material according to local, state and federal regulations.

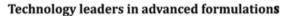
#### **Uncleaned packaging:**

**Recommendation:** Disposal must be made according to official regulations.

Recommended cleansing agents: Water, if necessary, together with cleansing agents.

#### **SECTION 14: Transport information**







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Version: 5.0 Revisi	on Date: 29.11.2021	This version replaces all previous versions.		
14.1 UN-Number ADR, IMDG, IATA		Not applicable.		
14.2 UN proper shipping name ADR, IMDG, IATA		Not applicable.		
14.3 Transport ha	zard class(es)			
ADR, ADN, IMDG, Class	, IATA	Not applicable.		
14.4 Packing grou ADR, IMDG, IATA	•	Not applicable.		
14.5 Environment	tal hazards:	Not applicable.		
14.6 Special prec	autions for user	Not applicable.		
14.7 Transport in bulk according to Annex II of Marpol and the IBC Code		Not applicable.		
UN "Model Regulation":		Not applicable.		

#### **SECTION 15: Regulatory information**

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

#### Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

#### **Precautionary statements**

P101: If medical advice is needed, have product container or label at hand.

P102: Keep out of reach of children.

P103: Read label before use.

P264: Wash thoroughly after handling.

P280: Wear protective gloves.

#### Directive 2012/18/EU

Named dangerous substances - ANNEX I Substance is not listed.

#### 15.2 Chemical safety assessment:

A Chemical Safety Assessment has not been carried out.

#### **SECTION 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.

#### Relevant phrases



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H315 Causes skin irritation.

### Department issuing SDS: Product safety department.

Contact:

Tel.: +91 22 - 4345 222 Fax: +91 224345/2245 Email: sml@sulphurmills.com

#### Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC<sub>50</sub>: Lethal concentration, 50 percent

LD<sub>50</sub>: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic vPvB: very Persistent and very Bioaccumulative Skin Irrit. 2: Skin corrosion/irritation – Category 2

#### Sources

REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006

Data from registered dossier

#### \* Data compared to the previous version altered.

Section 1: Identification of the substance/mixture and of the company/undertaking

Section 3: Composition/information on ingredients

Section 4: First-aid measures. Section 5: Fire-fighting measures

Section 6: Accidental Release measures

Section 7: Handling and storage.

Section 8: Exposure Controls/Personal protection.

Section 9: Physical and Chemical properties.

Section 10: Stability and Reactivity
Section 11: Toxicological Information.

Section 12: Ecological Information. Section 13: Disposal consideration

Section 16: Other information