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Safety Data Sheet
Kumulus DF Fungicide

1. Identification

Product identifier used on the label

Kumulus DF Fungicide

Recommended use of the chemical and restriction on use

Recommended use*: crop protection product, fungicide

* The “Recommended use” identified for this product is provided solely to comply with a Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

Details of the supplier of the safety data sheet

Company:
BASF Agricultural Solutions Canada Inc.
510, 28 Quarry Park Boulevard SE,
Calgary, AB, T2C 5P9
CANADA

Telephone: +1 (403) 523-3000

Emergency telephone number

24 Hour Emergency Response Information
CHEMTREC: 1-800-424-9300
BASF HOTLINE: (800) 454-COPE (2673)

Other means of identification

Chemical family: crop protection product, fungicide, water dispersible granules
PCP # 18836
Synonyms: Sulphur 80%

2. Hazards Identification

According to Hazardous Products Regulations (HPR) (SOR/2022-272)

Classification of the product

Combustible Dust Combustible Dust (1) Combustible Dust

Label elements

Signal Word:
Warning

Hazard Statement:
May form combustible dust concentration in air.

3. Composition / Information on Ingredients

According to Hazardous Products Regulations (HPR) (SOR/2022-272)

sulfur
CAS Number: 7704-34-9
Content (W/W): 80.0 %
Synonym: Sulfur, precipitated, sublimed or colloidal

The actual concentration is withheld as a trade secret.

4. First-Aid Measures

Description of first aid measures

General advice:
First aid providers should wear personal protective equipment to prevent exposure. Remove contaminated clothing. Move person to fresh air. If person is not breathing, call 911 or ambulance, then give artificial respiration, preferably mouth-to-mouth if possible. In case of intoxication, call a poison control center or physician for treatment advice, taking the packaging or the label of the product.

If inhaled:
Keep patient calm, remove to fresh air.

If on skin:
Rinse skin immediately with plenty of water for 15 - 20 minutes.

If in eyes:
Hold eyes open and rinse slowly and gently with water for 15 to 20 minutes. Remove contact lenses, if present, after first 5 minutes, then continue rinsing.

If swallowed:
Rinse mouth and then drink 200-300 ml of water. Do not induce vomiting. Never induce vomiting or give anything by mouth if the victim is unconscious or having convulsions. Immediate medical attention required.

Most important symptoms and effects, both acute and delayed

Symptoms: (Further) symptoms and / or effects are not known so far, Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11.

Indication of any immediate medical attention and special treatment needed

Note to physician

Antidote:	No known specific antidote.
Treatment:	Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. Fire-Fighting Measures

Suitable extinguishing media:
dry powder, foam, water spray

Unsuitable extinguishing media for safety reasons:
carbon dioxide

Special hazards arising from the substance or mixture

Hazards during fire-fighting:
carbon monoxide, carbon dioxide, sulfur oxides
The substances/groups of substances mentioned can be released in case of fire.

Advice for fire-fighters

Protective equipment for fire-fighting:
Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

Further information:
Evacuate area of all unnecessary personnel. Contain contaminated water/firefighting water. Do not allow to enter drains or waterways.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Take appropriate protective measures. Clear area. Shut off source of leak only under safe conditions. Extinguish sources of ignition nearby and downwind. Ensure adequate ventilation. Wear suitable personal protective clothing and equipment.

Environmental precautions

Do not discharge into the subsoil/soil. Do not discharge into drains/surface waters/groundwater. Contain contaminated water/firefighting water.

Methods and material for containment and cleaning up

Avoid raising dust. Sweep/shovel up. Place into suitable containers for reuse or disposal in a licensed facility. Spilled substance/product should be recovered and applied according to label rates whenever possible. If application of spilled substance/product is not possible, then spills should be contained, solidified, and placed in suitable containers for disposal. After decontamination, spill area can be washed with water. Collect wash water for approved disposal.

7. Handling and Storage

Precautions for safe handling

No special measures necessary if stored and handled correctly. Ensure thorough ventilation of stores and work areas. When using do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift.

Protection against fire and explosion:
Avoid dust formation. Keep away from sources of ignition - No smoking. Take precautionary measures against static discharges.

Conditions for safe storage, including any incompatibilities
Segregate from foods and animal feeds.

Further information on storage conditions: Keep away from heat. Protect against moisture. Protect from direct sunlight.
Protect from temperatures above: 40 °C
Changes in the properties of the product may occur if substance/product is stored above indicated temperature for extended periods of time.

8. Exposure Controls/Personal Protection

Users of a pesticidal product should refer to the product label for personal protective equipment requirements.

No substance specific occupational exposure limits known.

Advice on system design:
Whenever possible, engineering controls should be used to minimize the need for personal protective equipment.

Personal protective equipment

Respiratory protection:
Wear a NIOSH-certified (or equivalent) organic vapour/particulate respirator as needed.

Hand protection:
Chemical resistant protective gloves

Eye protection:
Safety glasses with side-shields. Wear face shield or tightly fitting safety goggles (chemical goggles) if splashing hazard exists.

Body protection:
Body protection must be chosen depending on activity and possible exposure, e.g. head protection, apron, protective boots, chemical-protection suit.

General safety and hygiene measures:
The statements on personal protective equipment in the instructions for use apply when handling crop-protection agents in final-consumer packing. Wearing of closed work clothing is recommended. Wear long sleeved work shirt and long work pants in addition to other stated personal protective equipment. Work place should be equipped with a shower and an eye wash. Handle in accordance with good industrial hygiene and safety practice. Wash soiled clothing immediately.

9. Physical and Chemical Properties

Physical state:	solid	
Form:	solid	
Odour:	faint specific odour, sulfur-like	
Odour threshold:	Not determined due to potential health hazard by inhalation.	
Colour:	grey brown to brown	
pH value:	approx. 7 - 9 (1 %(m), 20 °C)	(pH Meter)
Melting point:	approx. 112 - 116 °C	
Sublimation point:	No data available.	
Flash point:	not applicable, the product is a solid	
Flammability:	not highly flammable	
Autoignition:	not applicable, the product is a solid	
Density:	approx. 1.88 g/cm3 (20 °C)	
Bulk density:	870 - 953 kg/m3	
Partitioning coefficient n-octanol/water (log Pow):	not applicable for mixtures	
Self-ignition temperature:	246 °C	(Directive 92/69/EEC, A.16)
Thermal decomposition:	190 °C carbon monoxide, carbon dioxide, Sulphur dioxide, To be archived: Hydrocarbons Stable at ambient temperature. If product is heated above decomposition temperature toxic vapours may be released.	
Viscosity, kinematic:	not applicable, the product is a solid	
Solubility in water:	dispersible	
Solubility (quantitative):	No data available.	
Solubility (qualitative):	No data available.	
Evaporation rate:	not applicable	

Particle characteristics

No data available.

10. Stability and Reactivity

Reactivity
No hazardous reactions if stored and handled as prescribed/indicated.

Oxidizing properties:
not fire-propagating

Chemical stability
The product is stable if stored and handled as prescribed/indicated.

Possibility of hazardous reactions
No hazardous reactions if stored and handled as prescribed/indicated.

Conditions to avoid
Avoid all sources of ignition: heat, sparks, open flame. Avoid extreme temperatures. Avoid prolonged exposure to extreme heat. Avoid contamination. Avoid electro-static discharge. Avoid prolonged storage. This product may form an explosive mixture if: 1. the dust is suspended in the atmosphere

as a dust cloud AND 2. the concentration of the dust is above the lower explosion limit (LEL) AND 3. the limiting oxygen concentration (LOC) is exceeded.

Incompatible materials
strong bases, strong acids, strong oxidizing agents

Hazardous decomposition products

Decomposition products:
Hazardous decomposition products: No hazardous decomposition products if stored and handled as prescribed/indicated.

Thermal decomposition:
190 °C
Possible thermal decomposition products:
carbon monoxide, carbon dioxide, Sulphur dioxide, To be archived: Hydrocarbons
Stable at ambient temperature. If product is heated above decomposition temperature toxic vapours may be released.

11. Toxicological information

Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Acute Toxicity/Effects

Acute toxicity
Assessment of acute toxicity: No known acute effects.

Oral
Type of value: LD50
Species: rat (male/female)
Value: > 2,200 mg/kg (OECD Guideline 401)
No mortality was observed.

Inhalation
Type of value: LC50
Species: rat (male/female)
Value: > 5.4 mg/l (OECD Guideline 403)
Exposure time: 4 h

Dermal
Type of value: LD50
Species: rat (male/female)
Value: > 2,000 mg/kg (OECD Guideline 402)
No mortality was observed.

Assessment other acute effects
Assessment of STOT single:
Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

The product has not been tested. The statement has been derived from the properties of the individual components.

Irritation / corrosion
Assessment of irritating effects: Not irritating to the eyes. Not irritating to the skin.

Skin
Species: rabbit
Result: non-irritant
Method: OECD Guideline 404

Eye
Species: rabbit
Result: non-irritant
Method: OECD Guideline 405

Sensitization
Assessment of sensitization: There is no evidence of a skin-sensitizing potential.

Guinea pig maximization test
Species: guinea pig
Result: Non-sensitizing.
Method: OECD Guideline 406

Aspiration Hazard
No aspiration hazard expected. The product has not been tested. The statement has been derived from the properties of the individual components.

Chronic Toxicity/Effects

Repeated dose toxicity
Assessment of repeated dose toxicity: The product has not been tested. The statement has been derived from the properties of the individual components. No substance-specific organtoxicity was observed after repeated administration to animals.

Genetic toxicity
Assessment of mutagenicity: The product has not been tested. The statement has been derived from the properties of the individual components. Mutagenicity tests revealed no genotoxic potential.

Carcinogenicity
Assessment of carcinogenicity: The product has not been tested. The statement has been derived from the properties of the individual components. The results of various animal studies gave no indication of a carcinogenic effect.

Reproductive toxicity
Assessment of reproduction toxicity: The product has not been tested. The statement has been derived from the properties of the individual components. The results of animal studies gave no indication of a fertility impairing effect.

Teratogenicity
Assessment of teratogenicity: The product has not been tested. The statement has been derived from the properties of the individual components. Animal studies gave no indication of a developmental toxic effect at doses that were not toxic to the parental animals.

Other Information
Misuse can be harmful to health.

12. Ecological Information

Toxicity

Aquatic toxicity
Assessment of aquatic toxicity:
There is a high probability that the product is not acutely harmful to aquatic invertebrates. There is a high probability that the product is not acutely harmful to aquatic plants. There is a high probability that the product is not acutely harmful to fish.

Toxicity to fish
LC50 (96 h) > 100 mg/l, Oncorhynchus mykiss

Aquatic invertebrates
EC50 (48 h) > 1,000 mg/l, Daphnia magna (OECD Guideline 202, part 1, static)

Aquatic plants
EC50 (72 h) 290 mg/l, Ankistrodesmus bibraianus (OECD Guideline 201)

Assessment of terrestrial toxicity
With high probability not acutely harmful to terrestrial organisms.

Microorganisms/Effect on activated sludge

Toxicity to microorganisms
static
bacterium/EC50 (18 h): > 2,000 mg/l

Additional information

Other ecotoxicological advice:
Do not discharge product into the environment without control.

13. Disposal considerations

Waste disposal of substance:
Must be sent to a suitable incineration plant, observing local regulations.

Container disposal:
Contaminated packaging should be emptied as far as possible and disposed of in accordance with official regulations after being thoroughly cleaned.

14. Transport Information

Land transport
TDG

Not classified as a dangerous good under transport regulations

Sea transport
IMDG

Not classified as a dangerous good under transport regulations

Air transport
IATA/ICAO

Not classified as a dangerous good under transport regulations

15. Regulatory Information

Federal Regulations

Registration status:
Crop Protection DSL, CA released / exempt

16. Other Information

SDS Prepared by:
BASF Agricultural Solutions Canada NA Product Regulations
SDS Prepared on: 2025/12/05

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

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END OF DATA SHEET