

# Safety data sheet

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BASF Safety data sheet according to UN GHS 4th rev.

Date / Revised: 16.12.2022

Product: **Kumulus® WG**

Version: 3.0

(ID no. 30347184/SDS\_CPA\_00/EN)

Date of print 24.07.2023

## 1. Identification

### Product identifier

## Kumulus® WG

### Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses: crop protection product, fungicide

### Details of the supplier of the safety data sheet

#### Company:

BASF South Africa (Pty) Ltd  
852 Sixteenth Road  
Midrand  
P O Box 2801  
Halfway House 1685  
SOUTH AFRICA

Telephone: +27 11 203 2400

### Emergency telephone number

International emergency number:

Telephone: +49 180 2273-112

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## 2. Hazards Identification

### Classification of the substance or mixture

According to UN GHS criteria

No need for classification according to GHS criteria for this product.

### Label elements

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### Globally Harmonized System (GHS)

#### Precautionary Statement:

P101 If medical advice is needed, have product container or label at hand.  
P102 Keep out of reach of children.  
P103 Read carefully and follow all instructions.

The product does not require a hazard warning label in accordance with GHS criteria.

### **Other hazards**

#### According to UN GHS criteria

See section 12 - Results of PBT and vPvB assessment.

If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

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## **3. Composition/Information on Ingredients**

### **Substances**

Not applicable

### **Mixtures**

#### Chemical nature

crop protection product, fungicide, water dispersible granules

#### Hazardous ingredients (GHS)

According to UN GHS criteria

sulfur

Content (W/W): 80 %	Skin Corr./Irrit. 2
CAS Number: 7704-34-9	H315
EC-Number: 231-722-6	
INDEX-Number: 016-094-00-1	

Lignosulfonic acid, sodium salt

Content (W/W): < 20 %
CAS Number: 8061-51-6

For the classifications not written out in full in this section the full text can be found in section 16.

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## **4. First-Aid Measures**

### **Description of first aid measures**

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Remove contaminated clothing.

If inhaled:

Keep patient calm, remove to fresh air.

On skin contact:

Wash thoroughly with soap and water

On contact with eyes:

Wash affected eyes for at least 15 minutes under running water with eyelids held open.

On ingestion:

Rinse mouth and then drink 200-300 ml of water.

### **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**

Treatment: Symptomatic treatment (decontamination, vital functions).

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## **5. Fire-Fighting Measures**

### **Extinguishing media**

Suitable extinguishing media:  
dry powder, foam, water spray

Unsuitable extinguishing media for safety reasons:  
carbon dioxide

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

Carbon monoxide, Carbon dioxide, sulfur oxides  
The substances/groups of substances mentioned can be released in case of fire.

### **Advice for fire-fighters**

Special protective equipment:  
Wear self-contained breathing apparatus and chemical-protective clothing.

Further information:

In case of fire and/or explosion do not breathe fumes. Keep containers cool by spraying with water if exposed to fire. Collect contaminated extinguishing water separately, do not allow to reach sewage or effluent systems. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

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## **6. Accidental Release Measures**

### **Personal precautions, protective equipment and emergency procedures**

Avoid dust formation. Use personal protective clothing. Avoid contact with the skin, eyes and clothing.

### **Environmental precautions**

Do not discharge into drains/surface waters/groundwater. Do not discharge into the subsoil/soil.

### **Methods and material for containment and cleaning up**

For small amounts: Contain with dust binding material and dispose of.

For large amounts: Sweep/shovel up.

Avoid raising dust. Dispose of absorbed material in accordance with regulations. Collect waste in suitable containers, which can be labeled and sealed. Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations.

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## **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. Dust can form an explosive mixture with air. Prevent electrostatic charge - sources of ignition should be kept well clear - fire extinguishers should be kept handy.

### **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.

Storage stability:

Storage duration: 60 Months

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.

### **Specific end use(s)**

For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed.

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## **8. Exposure Controls/Personal Protection**

### **Control parameters**

Components with occupational exposure limits

| 7704-34-9: Sulfur

8061-51-6: Lignosulfonic acid, sodium salt

### **Exposure controls**

Personal protective equipment

Respiratory protection:

Respiratory protection not required.

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**Hand protection:**

Suitable chemical resistant safety gloves (EN ISO 374-1) also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN ISO 374-1): E.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), butyl rubber (0.7 mm) etc.

**Eye protection:**

Safety glasses with side-shields (frame goggles) (e.g. EN 166)

**Body protection:**

Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

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. Keep away from food, drink and animal feeding stuffs. Store work clothing separately.

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## 9. Physical and Chemical Properties

**Information on basic physical and chemical properties**

Form:	solid	
Colour:	grey brown to brown	
Odour:	faint specific odour, sulfur-like	
Odour threshold:	Not determined due to potential health hazard by inhalation.	
pH value:	approx. 7 - 9 (CIPAC standard water D, 1 %(m), 20 °C)	(pH Meter)
Melting point:	approx. 112 - 116 °C	
Boiling point:	The product is a non-volatile solid.	
Flash point:	not applicable	
Evaporation rate:	not applicable	
Flammability:	not highly flammable	
Lower explosion limit:	approx. 25 g/m <sup>3</sup>	(VDI 2263)
Upper explosion limit:	As a result of our experience with this product and our knowledge of its composition we do not expect any hazard as long as the product is used appropriately and in accordance with the intended use.	
Vapour pressure:	The product has not been tested.	
Density:	approx. 1,88 g/cm <sup>3</sup> (20 °C)	
Relative vapour density (air):	not applicable	

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Solubility in water: dispersible  
Partitioning coefficient n-octanol/water (log Kow): not applicable  
Self ignition: Temperature: 246 °C (Method: Directive 92/69/EEC, A.16)  
Thermal decomposition: 165 °C, 50 kJ/kg (DSC (OECD 113)) (onset temperature)  
265 °C, 30 kJ/kg (DSC (OECD 113)) (onset temperature) Not a substance liable to self-decomposition according to UN transport regulations, class 4.1.  
Viscosity, dynamic: not applicable, the product is a solid  
Explosion hazard: not explosive  
Fire promoting properties: not fire-propagating

### Other information

Self heating ability: Not tested on account of the low melting-point.

Bulk density: 870 - 953 kg/m<sup>3</sup>

Angle of repose: 34 °

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## 10. Stability and Reactivity

### Reactivity

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

### 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

See SDS section 7 - Handling and storage.

### Incompatible materials

Substances to avoid:  
strong bases, strong acids, strong oxidizing agents

### Hazardous decomposition products

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

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## 11. Toxicological Information

### Information on toxicological effects

Acute toxicity

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**Assessment of acute toxicity:**

Virtually nontoxic after a single ingestion. Virtually nontoxic after a single skin contact. Virtually nontoxic by inhalation.

**Experimental/calculated data:**

LD50 rat (oral): > 2.200 mg/kg (OECD Guideline 401)

No mortality was observed.

LC50 rat (by inhalation): > 5,4 mg/l 4 h (OECD Guideline 403)

LD50 rat (dermal): > 2.000 mg/kg (OECD Guideline 402)

No mortality was observed.

Irritation

**Assessment of irritating effects:**

Not irritating to the eyes. Not irritating to the skin.

**Experimental/calculated data:**

Skin corrosion/irritation rabbit: non-irritant (OECD Guideline 404)

Serious eye damage/irritation rabbit: non-irritant (OECD Guideline 405)

Respiratory/Skin sensitization

**Assessment of sensitization:**

There is no evidence of a skin-sensitizing potential.

**Experimental/calculated data:**

Guinea pig maximization test guinea pig: Skin sensitizing effects were not observed in animal studies. (OECD Guideline 406)

Germ cell mutagenicity

**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.

Developmental toxicity

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**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.

**Specific target organ toxicity (single exposure)****Assessment of STOT single:**

Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

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

**Repeated dose toxicity and Specific target organ toxicity (repeated exposure)****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 organotoxicity was observed after repeated administration to animals.

**Aspiration hazard**

No aspiration hazard expected.

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

**Other relevant toxicity information**

Misuse can be harmful to health.

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## 12. Ecological Information

### Toxicity

**Assessment of aquatic toxicity:**

There is a high probability that the product is not acutely harmful to aquatic organisms.

**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 bibrainus* (OECD Guideline 201)

**Microorganisms/Effect on activated sludge:**

EC50 (18 h) > 2.000 mg/l, *Pseudomonas putida* (static)

### Persistence and degradability

Assessment biodegradation and elimination (H<sub>2</sub>O):



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

*Information on: sulfur*

*Assessment biodegradation and elimination (H<sub>2</sub>O):*

*Not applicable for inorganic substances.*

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### **Bioaccumulative potential**

Assessment bioaccumulation potential:

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

*Information on: sulfur*

*Bioaccumulation potential:*

*Accumulation in organisms is not to be expected. The product will not be readily bioavailable due to its consistency and insolubility in water.*

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### **Mobility in soil**

Assessment transport between environmental compartments:

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

*Information on: sulfur*

*Assessment transport between environmental compartments:*

*Volatility:* The substance will not evaporate into the atmosphere from the water surface.

*Adsorption in soil:* Adsorption to solid soil phase is not expected. Study scientifically not justified.

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### **Results of PBT and vPvB assessment**

The product does not contain a substance fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria.

### **Other adverse effects**

The product does not contain substances that are listed in the Montreal Protocol on substances that deplete the ozone layer.

### **Additional information**

Other ecotoxicological advice:

Do not discharge product into the environment without control.

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## **13. Disposal Considerations**

### **Waste treatment methods**

Must be sent to a suitable incineration plant, observing local regulations.

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Contaminated packaging:  
Contaminated packaging should be emptied as far as possible and disposed of in the same manner as the substance/product.

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## 14. Transport Information

### Land transport

ADR

	Not classified as a dangerous good under transport regulations
UN number or ID number:	Not applicable
UN proper shipping name:	Not applicable
Transport hazard class(es):	Not applicable
Packing group:	Not applicable
Environmental hazards:	Not applicable
Special precautions for user	None known

RID

	Not classified as a dangerous good under transport regulations
UN number or ID number:	Not applicable
UN proper shipping name:	Not applicable
Transport hazard class(es):	Not applicable
Packing group:	Not applicable
Environmental hazards:	Not applicable
Special precautions for user	None known

### Inland waterway transport

ADN

	Not classified as a dangerous good under transport regulations
UN number or ID number:	Not applicable
UN proper shipping name:	Not applicable
Transport hazard class(es):	Not applicable
Packing group:	Not applicable
Environmental hazards:	Not applicable
Special precautions for user:	None known

### Transport in inland waterway vessel

Not evaluated

### Sea transport

IMDG

Not classified as a dangerous good under transport regulations

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UN number or ID number: Not applicable  
UN proper shipping name: Not applicable  
Transport hazard class(es): Not applicable  
Packing group: Not applicable  
Environmental hazards: Not applicable  
Special precautions for user: None known

### **Air transport**

IATA/ICAO

Not classified as a dangerous good under transport regulations  
UN number or ID number: Not applicable  
UN proper shipping name: Not applicable  
Transport hazard class(es): Not applicable  
Packing group: Not applicable  
Environmental hazards: Not applicable  
Special precautions for user: None known

### **Maritime transport in bulk according to IMO instruments**

Maritime transport in bulk is not intended.

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## **15. Regulatory Information**

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

To avoid risks to man and the environment, comply with the instructions for use.

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## **16. Other Information**

Full text of classifications, hazard symbols and hazard statements, if mentioned in section 2 or 3:  
Skin Corr./Irrit. Skin corrosion/irritation  
H315 Causes skin irritation.

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. This safety data sheet is neither a Certificate of Analysis (CoA) nor technical data sheet and shall not be mistaken for a specification agreement. Identified uses in this safety data sheet do neither represent an agreement on the corresponding contractual quality of the substance/mixture nor a contractually designated use. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.

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