

Country: RSA, NAM, BOT, ZAM, MOZ
Language: English
Version: 1

SDS Number: 000029
Issue Date: 2023-05-01
Print Date: 2024-11-21

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier				
Product form	Mixtures			
Trade name	Kumulus® WG			
Product code	200g 33214 (6001379105789)			
Registration Number	L2404 / N-AR0732			
SDS Number	000029			
1.2. Relevant identified uses of the substance or mixture and uses advised against				
1.2.1. Relevant identified uses				
Main use category	Water Dispersible Granule Fungicide.			
Industrial/Professional use spec	Home and Garden.			
Use of the substance/mixture	Fungicide.			
1.2.2. Uses advised against				
See product label for restrictions.				
1.3. Details of the supplier of the safety data sheet				
Supplier	BASF SE 67056 Ludwigshafen GERMANY			
Distributor	Agro-Serve (Pty) Ltd 15 Diesel Road, Isando, 1600, South Africa PO Box 1189, Isando, 1600, South Africa			
Telephone	+27 861 333 586 08h00 – 17h00 Monday to Friday			
Email	info@efekto.co.za			
Website	www.efekto.co.za			
1.4. Emergency telephone number				
Country	Organisation/Company	Address	Emergency number	Comment
Poisons Centre				
South Africa	Griffon Poisons Centre		082 446 8946	Dr Gerhard H Verdoorn
Spillage				
South Africa	Spill Tech		086 100 0366	


SECTION 2: Hazards identification

2.1. Classification of the substance or mixture	
Classification according to Regulation (EC) No. 1272/2008 [CLP] Mixtures	
Not a hazardous substance or mixture.	
See Section 16 for the full text of the H statements declared above.	
See Section 11 for more detailed information on health effects and symptoms.	
2.2. Label elements	
Labelling according to Regulation (EC) No. 1272/2008 [CLP]	
Not a hazardous substance or mixture.	
Hazard pictograms:	
Hazardous components which must be listed on the label:	• Sulfur
CLP Signal word:	
Hazard statements:	Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.
Precautionary statements:	
General Statements:	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.
Prevention Statements:	P234: Keep only in original container.
Response Statements:	P391: Collect spillage.
Storage Statements:	P410: Protect from sunlight.
Disposal Statement:	P501: Dispose of contents/container to a licensed hazardous-waste disposal contractor or collection site except for empty clean containers which can be disposed of as non-hazardous waste.
2.3. Other hazards	
None known.	

Country: RSA, NAM, BOT, ZAM, MOZ
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SECTION 3: Composition/information on ingredients

3.1. Substances					
Water Dispersible Granules (WDG)					
Biocidal product					
3.2. Mixtures				Classification according to Regulation (EC) No. 1272/2008 [CLP]	
Chemical Name	CAS-No.	EC – Number	Conc. % by weight	Classification	Warning Symbols
sulfur <small>(Hazard classification of this material is based on the worst possible case)</small>	7704-34-9	231-722-6	80.0 %	Skin Irrit. 2: H315.	
Lignosulfonic acid, sodium salt <small>(Hazard classification of this material is based on the worst possible case)</small>	8061-51-6	617-129-9	< 20 %		
Other ingredients (non-hazardous) to 100%		Balance		100 %	
Further information					
Sulfur	7704-34-9	M-Factor:			
For the full text of the Hazard statements mentioned in this Section, see Section 16.					

SECTION 4: First aid measures

4.1. Description of first aid measures	
General Advice	When possible, have the product container or label with you when calling a poison control centre or doctor or going for treatment.
First-aid measures after inhalation	Move person to fresh air. If person is not breathing, call an emergency responder or ambulance, then give artificial respiration; if by mouth use rescuer protection (pocket mask etc). Call a poison control centre or doctor for treatment advice. If breathing is difficult, oxygen should be administered by qualified personnel.
First-aid measures after skin contact	Take off contaminated clothing. Wash skin with soap and plenty of water for 15-20 minutes. Call a poison control centre or doctor for treatment advice. Wash clothing before reuse. Shoes and other leather items which cannot be decontaminated should be disposed of properly.
First-aid measures after eye contact	Hold eyes 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 eyes. Call a poison control centre or doctor for treatment advice. Suitable emergency eye wash facility should be available in work area.
First-aid measures after ingestion	Immediately call a poison control centre or doctor. Do not induce vomiting unless told to do so by a poison control centre or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person.
4.2. Most important symptoms and effects, both acute and delayed	
	No significant reaction of the human body to the product known.
4.3. Indication of any immediate medical attention and special treatment needed	
	Symptomatic treatment (decontamination, vital functions).

SECTION 5: Firefighting measures

5.1. Extinguishing media	
5.1.1. Suitable	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
5.1.2. Unsuitable	Water jet.
5.2. Special hazards arising from the substance or mixture	
	Under fire conditions some components of this product may decompose. The smoke may contain unidentified toxic and/or irritating compounds. Combustion products may include and are not limited to: Carbon monoxide. Carbon dioxide.
5.3. Advice for firefighters	
	Special protective equipment for fire-fighters Wear full protective clothing and self-contained breathing apparatus. Do not allow run-off from firefighting to enter drains or water courses. Cool closed containers exposed to fire with water spray.
5.3. 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.

Country: RSA, NAM, BOT, ZAM, MOZ
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SDS Number: 000029
Issue Date: 2023-05-01
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SECTION 6: Accidental release measures	
6.1. Personal precautions, protective equipment and emergency procedures	
6.1.1. For non-emergency personnel	
Emergency procedures	Keep unauthorized people away. Isolate hazard area. Avoid contact with spilled product or contaminated surfaces. Ventilate spillage area. Avoid contact with skin and eyes.
6.1.2. For emergency responders	
Protective equipment	Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
6.2. Environmental precautions	
	Do not allow to enter soil, waterways or wastewater canal.
6.3. Methods and material for containment and cleaning up	
For containment	Collect spillage.
Methods for cleaning up	For small amounts: Contain with dust binding material and dispose of. For large amounts: Sweep/shovel up. Avoid raising dust. Collect waste in suitable containers, which can be labelled and sealed. Dispose of absorbed material in accordance with regulations. Clean contaminated floors and objects thoroughly with water and detergents, observing environmental regulations. Wear suitable protective equipment.
Other information	Dispose of materials or solid residues at an authorized site.
6.4. Reference to other sections	
	Information regarding safe handling, see section 7. Information regarding personal protective equipment, see section 8. Information regarding waste disposal, see section 13.

SECTION 7: Handling and storage	
7.1. Precautions for safe handling	
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.
Hygiene measures	Wash hands thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco, using the toilet or applying cosmetics. Remove Personal Protective Equipment (PPE) immediately after handling this product. Before removing gloves clean them with soap and water. Remove soiled clothing immediately and clean thoroughly before using again. Wash thoroughly and put on clean clothing.
7.2. Conditions for safe storage, including any incompatibilities	
Storage conditions	Keep containers tightly closed in a dry, cool and well-ventilated place. Store in a place accessible by authorized persons only. Store in original container. Keep away from direct sunlight. Protect from freezing.
Storage temperature	>0°C <40°C
7.3. Specific end use(s)	
	Refer to the label and/or leaflet.

SECTION 8: Exposure controls/personal protection				
Control parameters				
Components	CAS-No.	Exposure limit(s)	Type of exposure limit	Source
sulfur	No specific occupational exposure limit has been established.			
RECOMMENDATIONS IN THIS SECTION ARE FOR MANUFACTURING, COMMERCIAL BLENDING AND PACKAGING WORKERS. APPLICATORS AND HANDLERS SHOULD SEE THE PRODUCT LABEL FOR PROPER PERSONAL PROTECTIVE EQUIPMENT AND CLOTHING.				
Appropriate engineering controls:	In normal use and handling conditions please refer to the label and/or leaflet. In all other cases the following recommendations would apply. Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, general ventilation should be sufficient for most operations. Local exhaust ventilation may be necessary for some operations.			
Hand protection:	Chemical resistant gloves should be used. Gloves should be certified to an appropriate standard. Gloves should have a minimum breakthrough time that is appropriate to the duration of exposure. The breakthrough time of gloves varies according to the thickness, material and manufacturer. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.			
Eye protection:	Safety glasses with side-shields (frame goggles) (e.g. EN 166).			
Skin and body protection:	Assess the exposure and select chemical resistant clothing based on the potential for contact and the permeation / penetration characteristics of the clothing material. Wash with soap and water after removing protective clothing. Decontaminate clothing before reuse, or use			

Country: RSA, NAM, BOT, ZAM, MOZ
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Version: 1

SDS Number: 000029
Issue Date: 2023-05-01
Print Date: 2024-11-21

Respiratory protection:	disposable equipment (suits, aprons, sleeves, boots, etc.) Wear as appropriate: impervious protective suit. A combination gas, vapor and particulate respirator may be necessary until effective technical measures are installed. Protection provided by air-purifying respirators is limited. Use a self-contained breathing apparatus in cases of emergency spills, when exposure levels are unknown, or under any circumstances where air-purifying respirators may not provide adequate protection.
	
General protective measures:	Handle in accordance with good industrial hygiene and safety practice. Wearing of closed work clothing is recommended. Store work clothing separately. Keep away from food, drink and animal feeding stuffs.
Environmental exposure controls:	Avoid release to the environment. For information regarding environmental exposure controls, see Section 6.

SECTION 9: Physical and chemical properties	
9.1. Information on basic physical and chemical properties	
1. Physical state	Solid
2. Colour	Brown
3. Odour	faint specific odour, sulfur-like
4. Odour threshold	No data available
5. Melting point / Freezing point	No data available
6. Boiling point or initial boiling point and boiling range	No data available
7. Flammability	Non-flammable
8. Lower and upper explosion limit	Not applicable
9. Flash point	Does not flash
10. Auto ignition temperature	> 246 °C Method: EEC A.15
11. Decomposition temperature	No data available
12. pH	7 – 9 (CIPAC standard water D, 1 %(m), 20 °C)
13. Kinematic viscosity	No data available
14. Solubility water	Completely miscible
15. Partition coefficient octanol / water (log value)	No data available
16. Vapour pressure	No significant volatility; aqueous solution
17. Density Solubility	Not applicable
18. Relative density	approx. 1,88 g/cm ³ (20 °C)
19. Particle characteristics	Not applicable
9.2. Other information	
No additional information available.	

SECTION 10: Stability and reactivity	
10.1. Reactivity	
	No hazardous reactions if stored and handled as prescribed/indicated.
10.2. Chemical stability	
	Stable under recommended storage conditions.
10.3. Possibility of hazardous reactions	
	No hazardous reactions when stored and handled according to prescribed instructions.
10.4. Conditions to avoid	
	Extremes of temperature and direct sunlight. Incompatible materials for storage: galvanised steel, unlined mild steel.
10.5. Incompatible materials	
	Store only in the original container.

SECTION 11: Toxicological information	
11.1. Information on toxicological effects	
Acute toxicity	: Not classified
Formulated Product	
LD50 oral rat	LD50 male rat, > -2 200 mg/kg
LD50 dermal rat	LD50 male and female rabbit, > 2 000 mg/kg
LC50 inhalation rat (mg/l)	LC50 rat, > 5,4 mg/L
Skin irritation	Not irritating to the skin. Skin corrosion/irritation rabbit: non-irritant (OECD Guideline 404)

Country: RSA, NAM, BOT, ZAM, MOZ
Language: English
Version: 1

SDS Number: 000029
Issue Date: 2023-05-01
Print Date: 2024-11-21

Eye irritation	Not irritating to the eyes Serious eye damage/irritation rabbit: non-irritant (OECD Guideline 405)
Sensitisation	There is no evidence of a skin-sensitizing potential. Guinea pig maximization test guinea pig: Skin sensitizing effects were not observed in animal studies. (OECD Guideline 406)
STOT-single exposure	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.
STOT-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.
Assessment mutagenicity	Not mutagenic. The product has not been tested. The statement has been derived from the properties of the individual components. Mutagenicity tests revealed no genotoxic potential.
Assessment 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.
Assessment toxicity to reproduction	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.
Assessment developmental toxicity	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.
Further information	N/A

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general: Very toxic to aquatic life with long lasting effects.

Isopropylamine Salt of Glyphosate

LC50 fish 1	Oncorhynchus mykiss (Rainbow trout)) > 1 000 mg/l static test; Exposure time: 96 h
EC50 Daphnia 1	Daphnia magna (Water flea) > 1 000 mg/l static test; Exposure time: 48 h
ErC50 (algae) 1	Selenastrum capricornutum (green algae): > 2 000 mg/l Exposure time: 72 h
Bees LD50 (oral)	> 9 742 µg / bee
Bees LC50 (contact)	> 8 309 µg / bee
Earthworm LC50	Eisenia fetida (earthworms): > 1 000 mg/kg dry soil
Birds Oral LD50	Colinus virginianus (Bobwhite quail): > 4 640 mg/kg Exposure time: 5 d
Birds LC50 (5-day diet)	Anas platyrhynchos (Mallard duck): > 4 640 mg/kg
Soil organism toxicity, microorganisms	27 l/ha, 28 days: Less than 25% effect on nitrogen or carbon transformation processes in soil.

12.2. Persistence and degradability

Assessment biodegradation and elimination (H₂O): 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 (H₂O): Not applicable for inorganic substances.

12.3. Bioaccumulative 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.

12.4. Mobility in soil

Ecology - 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: Adsorption in soil: Study scientifically not justified.

12.5. Results of PBT and vPvB assessment

This substance is not considered to be persistent, bioaccumulative and toxic (PBT). This substance is not considered to be very persistent and very bioaccumulative (vPvB)

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Country: RSA, NAM, BOT, ZAM, MOZ
Language: English
Version: 1

SDS Number: 000029
Issue Date: 2023-05-01
Print Date: 2024-11-21

Waste treatment methods	Dispose of contents/container in accordance with licensed collector's sorting instructions.
Additional information	Follow container label instructions for disposal of wastes generated during use in compliance with the product label. Never place unused product down any indoor or outdoor drain.
Contaminated packaging	Do not re-use empty containers. Place empty container in trash. Follow advice on product label and/or leaflet.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA / AND / RID				
ADR	IMDG	IATA	ADN	RID
14.1. UN number				
Not regulated.	Not regulated.	Not regulated.	Not regulated.	Not regulated.
14.2. UN proper shipping name				
Not classified as dangerous	Not classified as dangerous	Not classified as dangerous	Not classified as dangerous	Not classified as dangerous
Transport document description				
14.3. Transport hazard class(es)				
-	-	-	-	-
14.4. Packing group				
-	-	-	-	-
14.5. Environmental hazards				
No.	No.	No.	No.	No.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture	
Registration No.	L2404 / N-AR0732
This chemical is a registered pesticide product and is subject to certain labelling requirements under law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information required on the pesticide label.	
Hazard statements:	Do not inhale spray mist or dust. Destroy empty bags and never use for any other purpose. Prevent contamination of food, feed, drinking water and eating utensils.
WHO-classification:	III (Slightly hazardous)
Classification according to GHS:	Cat. 5: Unclassified
FRAC Fungicide Group Code:	M02
15.2. Chemical safety assessment	
No chemical safety assessment has been carried out.	

SECTION 16: Other information

Indication of changes:			
Section	Changed item	Change	Comments
Full text of H- and EUH-statements:			
H315	Causes skin irritation.		
Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:			
Skin Irrit. 2	H315	Calculation method	
HMIS (Hazardous Materials Identification System, based on the Third Edition Ratings Guide)			
Health - 1	Flammability - 0	Physical Hazard - 0	PPE -
0 = minimal hazard, 1 = slight hazard, 2 = moderate hazard, 3 = severe hazard, 4 = extreme hazard			
Abbreviations and acronyms			
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways.		
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road.		
ATE	Acute toxicity estimate.		
CAS-Nr.	CAS-Nr. Chemical Abstracts Service number.		
CEILING	Ceiling Limit Value.		
Conc.	Concentration.		

Country: RSA, NAM, BOT, ZAM, MOZ
Language: English
Version: 1

SDS Number: 000029
Issue Date: 2023-05-01
Print Date: 2024-11-21

EC-No.	European community number.
ECx	Effective concentration to x %.
IATA	International Air Transport Association.
IBC	International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IBC Code).
ICx	Inhibition concentration to x %.
IMDG	International Maritime Dangerous Goods.
LCx	Lethal concentration to x %.
LDx	Lethal dose to x %.
LOEC/LOEL	Lowest observed effect concentration/level.
MARPOL	MARPOL: International Convention for the prevention of marine pollution from ships.
N.O.S.	Not otherwise specified.
NOEC/NOEL	No observed effect concentration/level.
OECD	Organization for Economic Co-operation and Development.
OES	Occupational Exposure Standard.
PEAK	PEAK: Exposure Standard - Peak means a maximum or peak airborne concentration of a particular substance determined over the shortest analytically practicable period of time which does not exceed 15 minutes.
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail.
SK-SEN	Skin sensitiser.
SKIN_DES	SKIN_DES: Skin notation: Absorption through the skin may be a significant source of exposure.
STEL	STEL: Exposure standard - short term exposure limit (STEL): A 15-minute TWA exposure which should not be exceeded at any time during a working day even if the eight-hour TWA average is within the TWA exposure standard. Exposures at the STEL should not be longer than 15 minutes and should not be repeated more than four times per day. There should be at least 60 minutes between successive exposures at the STEL.
TWA	TWA: Exposure standard - time-weighted average (TWA): The average airborne concentration of a particular substance when calculated over a normal eight-hour working day, for a five-day working week.
UN	United Nations.
WHO	World health organisation.

This safety data sheet provides health and safety information. This product is to be used in applications with best use practice. The product information in this data sheet is to the best of our knowledge correct as at the date of publication. Agro-Serve (Pty) Ltd does not accept responsibility for damage caused by incorrect use of this information.

Training and related advice: This document contains important information to ensure the safe storage, handling of this product. It is the responsibility of your organisation to ensure that the information contained in this document is communicated to staff and that all necessary training has been given.

This information is provided in good faith but without express or implied warranty. The customer assumes all responsibility for safety and use not in accordance with label instructions.

Prepared BY: Nico Lionel van der Westhuis – Technical Support Marketing

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End of Safety Data Sheet