

SAFETY DATA SHEET**1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

Product Name: FIGHTER
Other identifier: FIGHTER
Recommended use: Fungicide
Restrictions on use: Agriculture
Supplier: Rolfes Agri (Pty) Ltd
 288 Mundt Street
 Waltloo
 Pretoria, South Africa
Telephone: +27(0)12 803 0145
E-mail Address: info@rolfesagri.co.za
Emergency Phone Numbers:
 Tygerberg Poison Information Centre +27 (86) 1 555 777
Office hour poisoning helpline
 Rolfes Agri (Pty) Ltd +27 (12) 803 0145
Spill Response and Transport Incidents
 Spill Tech, 086 100 0366, www.spilltech.co.za
 Oil and chemical pollution control 083 253 6618

2. HAZARDS IDENTIFICATION

GHS classification and labelling of chemicals and the Regulations for Hazardous Chemical Agents - 2021.

Hazard class	Hazard category	H-statement
Health Hazards		
Eye Irritation	Category 2	H319
Reproductive Toxicity	Category 2	H361

The most important adverse effects:
Physiochemical effects: None known.

Human health effects:
 Causes serious eye irritation (Eye Irrit.2)
 Suspected of damaging fertility or the unborn child (Repr. 2)

Pictograms:



Signal word: Danger

Hazard statements:

H319: Causes serious eye irritation
 H361d: Suspected of damaging fertility or the unborn child.

Precautionary Statements:

P101 If medical advice is needed, have container or label at hand.
 P102 Keep out of reach of children.
 P103 Read carefully and follow all instructions.
 P203: Obtain, read and follow all safety instructions before use.
 P264 + P265: Wash hands and affected area thoroughly after handling. Do not touch eyes.
 P280: Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
 P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P318: IF exposed or concerned, get medical advice.
 P337 + P317: If eye irritation persists: Get medical help.
 P405: Store locked up.
 P501 Empty all contents from the container by placing it upside down over the spray tank and holding it there for at least 30 seconds. Puncture the rinsed container to render it useless and send to a recycler.

Special labelling of certain mixtures:

None known.

Other hazards:

None known.

Toxicity:

Classification according to GHS: Not Classified.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredients with Hazard Concerns (GHS): According to UN GHS criteria

Hazardous Component	CAS Number	Conc. (m/v) %	GHS Classification
Potassium Phosphite	13492-26-7	30-60%	Eye Irrit. 2 (H319)
Salicylic Acid	69-72-7	<10%	Acute Tox. 4 (H302) Eye Dam. 1 (H318) Repr. 2 (H361d)

NOTE: There are no other ingredients present according to the current knowledge of the supplier (considering their

concentrations present in the product) that are classified as hazardous to health or the environment and that cause/contribute to the correct GHS classification of this product. These ingredients are therefore, in terms of the South African Hazardous Chemical Agent Regulations 2021; Regulation 14(b), not listed.

4. FIRST AID MEASURES

General Advice: The symptoms resulting from direct exposure to the product could appear a while after exposure. If persistent discomfort, seek medical attention. Provide this SDS to medical personnel for treatment.

Immediately remove contaminated clothing and remove the affected person from the contamination area. Keep the person warm, calm and covered up. First Aid personnel should pay attention to their own safety.

Eye contact: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation persists, get medical help.

Skin contact: Remove all contaminated clothing and shoes. Wash contaminated clothing before re-use. Wash the skin immediately with plenty of water and soap.

Inhalation: Remove the affected victim from exposure to an area with fresh air as a precaution. If not breathing, administer artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Obtain immediate medical attention.

Ingestion: If exposed or concerned, get medical advice.

Most important symptoms/effects, acute and delayed:

Symptoms of exposure to the product include eye irritation and reproductive toxicity.

Notes to physician: Treat symptomatically and supportively.

5. FIRE FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media:

Use carbon dioxide, dry chemical, alcohol resistant foam, or water spray. Do not use water jets.

Specific hazards arising from the chemical including thermal decomposition products: Fires involving the product may produce irritating or poisonous vapours, mists, or other products of combustion. Closed containers may explode from vapour expansion in high heat.

Special protective equipment and precautions for fire-fighters: Firefighters must wear emergency equipment including positive pressure self-contained breathing apparatus with a full-face mask. Remove unaffected containers from fire area if possible.

Additional provisions: Act in accordance with the site's Internal Emergency Plan and the Workplace Specific Procedures for actions to be taken after an accident or other emergencies.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures:

Ventilate the area of the spill or leak, especially when in confined areas. Do not touch or walk through spilled material as slippery when spilt. Contain spills if it can be done without risk and clean-up immediately.

Wear appropriate protective clothing recommended in Section 8 of the SDS.

Environmental Precautions:

Prevent spillage or further leakage if safe to do so.

Do not allow the spilt product to enter water courses and drains and avoid contact with soil. Do not allow the spilt product to spread to other areas - keep the spilt material contained and isolated. Report spills and releases as required to appropriate authorities if the spilt product has caused environmental pollution (sewers, water ways, soil or air).

Methods for cleaning up:

For small spills, soak up with damp earth or sand, or other non-Combustible absorbent material. Place into a labelled waste container subsequent reclamation or disposal. Keep the wash water out of drains, sewers and waterways.

For large spills, contain the spillage with absorbent material (non-combustible for flammable products). Sweep up with absorbent material, contain and collect spilt product in suitable containers for proper disposal. Keep the wash water out of drains, sewers and waterways.

Reference to other sections:

See Section 1 for emergency contact information.

See Section 8 for information on appropriate personal protective equipment.

See Section 13 for additional waste treatment information.

7. HANDLING AND STORAGE REQUIREMENTS

Precautions for safe handling

Do not return product residues to the storage containers. Always provide good ventilation in the work area. Prevent contact with eyes, skin and clothing. Do not breathe in dust/vapours/spray mists. Wear protective clothing and equipment during handling as described in Section 8 of the SDS. Do not eat or drink during use. Wash the hands and face thoroughly with soap after handling. Keep containers closed when not in use. Do not permit smoking in use or storage areas.

Locate emergency showers and eye-rinsing facility near the work/handling area. Maintain good normal industrial hygiene and housekeeping practices in areas where the product is used or handled.

Conditions for safe storage, including any Incompatibilities

Always store locked up and keep containers tightly closed when not in use. Store in a cool, dry and well-ventilated place, out of direct sunlight. Check storage containers regularly for leaks and protect containers from physical damage. Store in the original container, avoid cross

contamination with other agricultural products. Keep out of reach of children, uninformed persons, and animals. Do not contaminate water, food, or feed by storage or disposal.

It is recommended to have appropriate spill control kits equipped with absorbent material in close proximity to storage areas (see Section 6).

Specific end use(s)

Use as directed. Use original container.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

National Occupational Exposure Limits – Restricted limits for hazardous chemical agents.

Component	Type	Control Parameter	Update	Reference
N/A	OEL-eight-hour TWA	N/A	2021	South African RELs*
	OEL-STEL/C	N/A	2021	South African RELs*

*REL: Recommended Exposure Limit.

OEL-eight-hour TWA:

Occupational Exposure Limit- Time Weighted Average. Calculated over an eight-hour working day, for a five-day working week.

OEL-STEL/C:

Occupational Exposure Limit – short Term Exposure Limit /Ceiling Limit. Peak airborne concentration determined over the shortest analytically practicable period of time, which does not exceed 15 minutes.

National Biological Exposure Indices (BEIs) for hazardous chemical agents:

Component	Sample Matrix	Sample Time	Value
Not applicable	N/A	N/A	N/A

Appropriate engineering controls: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

PERSONAL PROTECTIVE EQUIPMENT:

Respiratory protection: Respiratory protection selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. Use a properly fitted and well-maintained particulate filter respirator, complying with an approved standard. Respirator selection and use should be based on contaminant type, form and concentration. For emergency conditions, use an approved positive-pressure self-contained breathing apparatus.

Skin and Hand Protection: Select skin and hand protection based on the task being performed and the risks

involved with the task. The gloves should be replaced immediately in case of damage or signs of wear. The personal protective clothing must be properly fitted and well maintained.

Eye/Face Protection: Select safety eye/face protection based on the task being performed and the risks involved with the task. Wear tightly fitted and well-maintained safety eyewear compliant with an approved standard.

Hygiene Measures: Wash the hands and/or face before breaks, eating, smoking, or using the lavatory and at the end of the shift/working period. Eye wash fountains and safety showers should be available and easily accessible. Wash contaminated clothing before reuse.

Environmental exposure controls

In accordance with the local legislation for the protection of the environment it is recommended to avoid environmental spillage or releases of both the product and its container.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance/physical state: Liquid Soluble Concentrate.

Odour: Faint characteristic odour.

Colour: Clear (Colourless)

Boiling Point: Not applicable.

Vapour Pressure (mm Hg): Not applicable.

Evaporation Rate: Not applicable.

Relative Vapour Density: Not applicable.

Partition coefficient n-octanol/water: Non-applicable.

Solubility in water: Completely soluble in water.

Decomposition temperature: Not applicable.

Melting point/freezing point: Not applicable.

Explosive properties: No explosive properties.

pH: 5.5 – 6.0

Density/relative density(kg/m3): 1.32 – 1.34

Flammability: Not flammable.

Flash Point: Not applicable.

Flammable limits-LEL: Not applicable.

Auto-ignition temperature: Not applicable.

Lower/Upper flammability limit: Non-applicable.

Viscosity: Not available.

10. STABILITY AND REACTIVITY

Reactivity: The product is stable under normal ambient conditions.

Chemical Stability: This product is stable for 2 years at ambient temperature and pressure, under normal storage and handling conditions. Avoid storage under extreme temperatures and conditions. Store below 50°C, preferably below 30°C, and not for prolonged periods in direct sunlight.

Possibility of Hazardous Reactions: None known under conditions of normal use.

Conditions to Avoid: Avoid extreme temperatures (>50°C). Keep away from heat and ignition sources.

Incompatible Materials: Incompatible with: Avoid strong oxidizing agents and acids.

Hazardous Decomposition Products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY: Calculated.

Acute Toxicity Oral: Not classified.

Acute Toxicity Dermal: Not classified.

Acute Toxicity Inhalation: Not classified.

Skin Corrosion/Irritation: Not classified.

Eye Damage/Irritation: Causes serious eye irritation.

Skin Sensitization: Not classified.

Respiratory Sensitization: Not classified.

Germ cell mutagenicity: Not classified.

Carcinogenicity: Not classified.

Reproductive toxicity: Suspected of damaging fertility or the unborn child.

Specific target organ toxicity – single exposure: Not classified.

Specific target organ toxicity – repeated exposure: Not classified.

Aspiration hazard: Not classified.

Symptoms related to the physical, chemical, and toxicological characteristics.

Causes eye irritation, suspected of damaging fertility or the unborn child.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Short- Short-term (Acute) hazard Aquatic: Does not meet the GHS Classification criteria.

Long-term (Chronic) hazard Aquatic: Does not meet the GHS Classification criteria.

Biodegradability in the aquatic environment: No information available.

Toxicity to other species

Birds: No information available.

Bees: No information available.

Other Environmental and Adverse Effects

Persistence and Degradability

No information available.

Bioaccumulative Potential:

Potassium Phosphite- BCF (aquatic species): 0.5 L/kg ww

Mobility in Soil:

No information available.

Other Adverse Effects:

None known.

13. DISPOSAL CONSIDERATIONS

Waste handling and disposal: Dispose product related waste in accordance with all local regulations and prevent the contamination of water, food, or feed by storage or disposal of the waste. The product container may be taken to a registered waste disposal site or incineration plant.

General container handling: Empty all contents from the container by placing it upside down over the spray tank and holding it there for at least 30 seconds. Puncture the rinsed container to render it useless and send to a recycler.

14. TRANSPORT INFORMATION

	Land Transport (ADR/RID)	Inland Waterways (AND/ADNR)	Sea Transport (IMDG)	Air Transport (ICAO-TI / IATA-DGR)
UN Number	Not Regulated	Not Regulated	Not Regulated	Not Regulated
UN Proper Shipping Name	-	-	-	-
Transport Hazard Class	-	-	-	-
Transport Hazard Class Pictogram	-	-	-	-
Packing Group	-	-	-	-
Environmental Hazard	-	-	-	-

15. REGULATORY INFORMATION

Safety, health and environmental regulations/legislation for the mixture.

South Africa

Regulations for Hazardous Chemical Agents – 2021 – SA Occupational Health and Safety Act. - Handling, labelling and Safety Data Sheets for hazardous and GHS classified substances and mixtures. Occupational Exposure Limits. Hazardous Substances Act, 1973 (Act No.15 of 1973) - Requirements on the prohibition and control of the importation, manufacture, sale, use, operation, application, modification, disposal or dumping of hazardous substances. Occupational Health and Safety Act No. 85 of 1993.- Occupational Health and Safety Standards for employers and users working with and around hazardous chemical substances. National Road Traffic Act, 1996 (ACT NO. 93 of 1996). - The identification and classification of dangerous goods for transport by road and rail modes.

Botswana

Pesticides and Toxic Substances Regulations. 1994 (2006) - Control and management of pesticides and other toxic substances. Environmental and Pollution Control Act. 1990 - Hazardous waste disposal, hazardous substances,

pesticides, and effluent wastewater/discharge.

Namibia

Labour Act 11 of 2007 - Hazardous substances classification, labelling, Chemical Safety Data Sheets and Occupational Exposure Limits. Notification of the use of carcinogens and other controlled substances. Regulations relating to the Health and Safety of Employees at Work Government Notice 156 of 1997. Labour Act 11 of 2007 schedule, item 2(2). - Occupational Health and Safety Standards for employers and users working with and around hazardous chemical substances.

16. OTHER INFORMATION

Packaging: Packed in 1, 5, 10, 20, 25 and 210 L plastic containers and labelled according to South African regulations and guidelines.

Relevant classification and H-Statements:

Eye Irritation – Category 2

H319: Causes serious eye irritation.

Reproductive Toxicity – Category 2

H361d: Suspected of damaging fertility or the unborn child.

Key to Abbreviations

AND	European Provisions concerning the International Carriage of Dangerous Goods by inland Waterways
ADR	The European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
COD	Chemical Oxygen Demand
GHS	Globally Harmonised System of Classification and Labelling of Chemicals
IATA	International Air Transport Association
ICAO	International Civil Aviation Organisation
IMDG	International Maritime Dangerous Goods
Log_{Pow}	Logarithm of the octanol/water partition coefficient
LD₅₀	Lethal Dose 50
LC₅₀	Lethal Concentration 50
RID	The Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
UN	United Nations

Notice to Reader

The information contained in this Safety Data Sheet relate only to the specific product and do not relate to the use of the product in combination with any other product or process. Information in the SDS is supplied to the best of **ROLFES AGRI (PTY) LTD's** knowledge and are believed to be current and correct as of the date on this SDS. All reasonable efforts were exercised to compile this SDS in

accordance with the Globally Harmonized System of Classification and Labelling of Chemicals (GHS).

The SDS only provides information applicable to the health, safety and environmental hazards of this product at the date of issue in order to facilitate the safe use, handling, storage and transport of this product and does not replace any product information or product specifications.

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END OF SAFETY DATA SHEET
