

SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: MUSCLE-UP FIZZ 500 ST

Other identifier: MUSCLE-UP FIZZ 500 ST

Recommended use: Herbicide

Restrictions on use: Agriculture, Forestry, Home & Garden

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:

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

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

Hazard class	Hazard category	H-statement
Health		
Skin Corrosion/Irritant	2	H315
Serious Eye Damage/Eye Irritation	1	H318
Environment		
Hazardous to the aquatic environment, long-term hazards	2	H411

The most important adverse effects:

Physiochemical effects: None known.

Human health effects:

Causes skin irritation.

Causes serious eye damage.

Pictograms:



Signal word: Danger.

Hazard statements:

H315: Causes skin irritation.

H318: Causes serious eye damage.

H411: Toxic to aquatic life with long lasting effects.

Precautionary 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.

P264 + P265: Wash hands and affected area thoroughly after handling. Do not touch eyes.

P273: Avoid release to the environment.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P302 + P352: IF ON SKIN: Wash with plenty of water.

P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P321: Specific treatment (see first aid on this SDS).

P332+P317: If skin irritation occurs: Get medical help.

P361 + P364: Take off immediately all contaminated clothing and wash it before reuse.

P391: Collect spillage.

P501: Empty all pesticides 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 (South Africa).

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
Sodium Benzene Sulfonate	85536-14-7	<10	Skin corr. 1C Eye Dam.1
Glyphosate Acid	1071-83-6	30 to 60	Aquatic Chronic 2 Serious eye damage (Category 1)
Poly Alkyl Glucoside	68515-73-1	<10	Eye Dam. 1 Skin Irrit. 2

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 there is 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: Immediately rinse with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Skin Contact: IF ON SKIN: Wash with plenty of water. If skin irritation occurs: Get medical help. Take off contaminated clothing and wash it before reuse.

Inhalation: Remove the affected victim from exposure to an area with fresh air. If breathing has stopped, 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 skin irritation and eye irritation.

Notes to physician: Use proparacaine hydrochloride to assist eye irrigation.

Specific treatments:

Treat symptomatically and supportively.

5. FIRE FIGHTING MEASURES

Suitable (and unsuitable) extinguishing media:

Use carbon dioxide, dry chemical for small fires and alcohol resistant foam or water fog for large fires. 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, Sweep up with damp 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, Sweep up with absorbent material. Avoid creating dusty conditions and prevent wind dispersal and place the residues into a suitable container 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

Always provide good ventilation in the work area. Prevent contact with eyes, skin and clothing. Do not breathe in dust. 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/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
Not applicable	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.

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

Data applicable to mixture
Appearance/physical state: Tablet (water soluble)
Odour: Aldehyde odour
Colour: Light pink
Boiling Point: Not applicable
Vapour Pressure (mm Hg): Not applicable
Evaporation Rate: Not applicable
Relative Vapour Density: Not applicable
Solubility in water: Soluble in water
Decomposition temperature: Not applicable
Melting point/freezing point: Not applicable
pH: 6.1 – 6.3
Density at 20°C: Not applicable.
Flammability: N
Flash Point: Does not flash
Flammable limits-LEL: Not applicable.

Auto-ignition temperature: Not applicable.

Viscosity: Not available.

*Not relevant due to the nature of the product, not providing information property of its hazards.

Other Hazard Information

None Known.

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:

Oral: Does not meet the GHS Classification criteria.

Dermal: Does not meet the GHS Classification criteria.

Inhalation: Does not meet the GHS Classification criteria.

Skin Corrosion/Irritation: Sodium Benzene Sulfonate <10%

Danger! This substance causes skin irritation.

Category 2.

Eye Damage/Irritation: Glyphosate Acid 30 to 60%, Poly Alkyl Glucoside <10% and Sodium Benzene Sulfonate <10%

Danger! This substance causes serious eye damage.

Category 1.

Skin Sensitization: Does not meet the GHS Classification criteria.

Respiratory Sensitization: Does not meet the GHS Classification criteria.

Germ cell mutagenicity:

Carcinogenicity: Does not meet the GHS Classification criteria.

Reproductive toxicity: Does not meet the GHS Classification criteria.

Specific target organ toxicity – single exposure: Does not meet the GHS Classification criteria.

Specific target organ toxicity – repeated exposure: Does not meet the GHS Classification criteria.

Aspiration hazard: Does not meet the GHS Classification criteria.

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

No information available.

12. ECOLOGICAL INFORMATION

ECOTOXICITY

Short-term (Acute) Hazard Aquatic: Does not meet the GHS Classification Criteria.

Long-term (Chronic) Hazard Aquatic: Glyphosate acid 30 to 60%

Danger! this substance is toxic to aquatic life with long lasting effects.

category 2.

Bio-degradability 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:

No information available.

Mobility in soil:

No information available.

Other adverse effects:

None known.



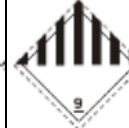
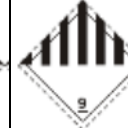




13. DISPOSAL CONSIDERATIONS

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.

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. Do not use empty containers for any other purpose.

14. TRANSPORT INFORMATION

	Land Transport (ADR/RID)	Inland Waterways (AND/ADNR)	Sea Transport (IMDG)	Air Transport (ICAO-TI / IATA-DGR)
UN Number	3077	3077	3077	3077
UN Proper Shipping Name	ENVIRONM ENTALLY HAZARDO US SUBSTANC E, SOLID,	ENVIRONM ENTALLY HAZARDO US SUBSTANC E, SOLID,	ENVIRONM ENTALLY HAZARDO US SUBSTANC E, SOLID,	ENVIRONM ENTALLY HAZARDO US SUBSTANC E, SOLID,

	N.O.S (CONTAINS GLYPHOS ATE)	N.O.S (CONTAINS GLYPHOS ATE)	N.O.S (CONTAINS GLYPHOS ATE)	N.O.S (CONTAINS GLYPHOS ATE)
Transport Hazard Class	9	9	9	9
Transport Hazard Class Pictogram				
Packing Group	III	III	III	III
Environmental Hazard				

Indication of changes

Alignment to the GHS

Relevant classification and H-Statements:

Skin Corrosion/Irritant - Category 2
H315: Causes skin irritation.

Serious Eye Damage/Eye Irritation- Category 1
H318: Causes serious eye damage.

Hazardous to the aquatic environment, long-term hazards-
Category 2

H411: Toxic to aquatic life with long lasting effects

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.

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

It is not possible for **ROLFES AGRI (PTY) LTD** to anticipate or control all conditions under which this product, this product may be used, handled, stored or transported. The obligation of the user, receiver, handler or transporter remains to review the content of the SDS prior to potentially exposing persons/employees to the product and to consider any risks that may associated with the hazards of the product during use, handlings, storage or transportation. Appropriate health, safety and environmental protection risk mitigating measures must be in place and such information must be communicated to all persons that might be involved with and exposed to this product.

Disclaimer:

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This document is intended only as a guide to the appropriate precautionary handling and use of the product by a properly trained person. Individuals receiving the information must exercise their independent judgement in determining its appropriateness for a particular purpose. When this product is sold, risk passes to the purchaser in accordance with the specific terms and conditions of sale. Accordingly, Rolfes Agri Proprietary Limited will not be responsible for damages resulting from use or reliance upon this information.

END OF SAFETY DATA SHEET
