

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

**Product Name:** AMMO-UP  
**Other identifier:** AMMO-UP  
**Recommended use:** Adjuvant  
**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](mailto: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](http://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
Not Classified according to GHS		

**The most important adverse effects:**

**Physiochemical effects:** None known.

**Human health effects:**

Not applicable.

**Pictograms:**

No pictogram.

**Signal word:**

No signal word.

**Hazard statements:**

Not applicable

**Precautionary statements:**

Not applicable

**Special labelling of certain mixtures:**

None known.

**Other hazards:**

None known.

**Toxicity:**

Classification according to GHS: Category 5/ Not classified

**3. COMPOSITION / INFORMATION ON INGREDIENTS**

**Ingredients with Hazard Concerns (GHS):** Not classified according to GHS.

**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:** Immediately flush eyes with large amounts of flowing cold water for 15-20 minutes, until no evidence of chemical remains. If irritation persists, get medical help.

**Skin contact:** Remove all contaminated clothing and shoes. Gently wipe off residual chemical and wash skin thoroughly with non-abrasive soap. If irritation persists, get medical help.

**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 medical advice if necessary.

**Ingestion:** If exposed or concerned, rinse mouth thoroughly with water and get medical advice.

**Most important symptoms/effects, acute and delayed:** None known.

**Notes to physician:** Treat symptomatically and supportively. No specific antidote known.

**5. FIRE FIGHTING MEASURES****Suitable (and unsuitable) extinguishing media:**

Use carbon dioxide, dry powder 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:** Not considered to be

a fire hazard. Flammable ammonia gas may be released in a fire. Some could burn, but none ignite readily. Containers could explode when heated.

**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

Always provide good ventilation in the work area. Prevent contact with eyes, skin, and clothing. Do not breathe in dust/fumes. Wear protective clothing and equipment during handling as described in Section 8 of the SDS.

Do not eat, drink, or smoke when using this product. Wash hands and face thoroughly with soap after handling. Keep containers closed when not in use. 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 near 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*

**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 goggles/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 drinking, 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 re-use.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance/physical state:** Liquid.

**Odour:** Slight odour of ammonia.

**Colour:** Red coloured liquid.

**Boiling Point:** >100°C.

**Vapour Pressure (mm Hg):** Not available.

**Evaporation Rate:** Not available.

**Relative Vapour Density:** Not available.

**Solubility in water:** Soluble in water.

**Decomposition temperature:** Not available.

**Melting point/freezing point:** Not available.

**pH:** 3.5

**Density/relative density(g/cm<sup>3</sup>):** 1.25

**Flammability:** Not flammable.

**Flash Point:** Not applicable.

**Flammable limits-LEL:** Not applicable.

**Auto-ignition temperature:** Not applicable.

**Viscosity:** Not available.

## 10. STABILITY AND REACTIVITY

**Reactivity:** None known.

**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:** Not available.

**Conditions to Avoid:** Heat and Incompatibles.

**Incompatible Materials:** None known.

**Hazardous Decomposition Products:** May emit ammonia, oxides of sulphur, oxides of nitrogen and oxides of carbon.

## 11. TOXICOLOGICAL INFORMATION

### ACUTE TOXICITY:

**Oral LD<sub>50</sub> (24 h)** >4500 mg/kg (rat).

**Dermal LD<sub>50</sub> (24 h)** >4500 mg/kg (rat).

**Skin Corrosion/Irritation/:** Not classified.

**Eye Damage/Irritation:** Not classified.

**Skin Sensitization:** Not classified.

**Respiratory Sensitization:** Not classified.

**Germ cell mutagenicity:** Not classified.

**Carcinogenicity:** Not classified.

**Reproductive toxicity:** Not classified.

**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.**

No information available.

## 12. ECOLOGICAL INFORMATION

**ECOTOXICITY DATA: Active ingredient.**

Not available.

### ENVIRONMENTAL EFFECTS:

**Plants:** Not determined.

**Persistence and degradability:** Not available.

**Bio-accumulative Potential:** Not available.

**Mobility in soil:** Not available.

**Other adverse effects:** Not determined.

## 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/bags may be taken to a registered waste disposal site or incineration plant.

**General container handling:** TRIPLE RINSE empty containers by inverting the empty container over the spray or mixing tank and drain for at least 30 seconds after the flow has slowed down to dripping. Thereafter rinse the empty container three times in succession with one quarter of the container volume fresh water and decant the rinsate into the spray or mixing tank. Puncture the triple rinsed container and dispose of via an approved collector or recycler ([www.croplife.co.za](http://www.croplife.co.za)). If recycling is not practicable, dispose of in compliance with local regulations.

## 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	-	-	-	-

<b>Pictogram</b>				
<b>Packing Group</b>	-	-	-	-
<b>Environmental Hazard</b>	-	-	-	-

\*Not a classified as dangerous goods.

## 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, 25, 210 L plastic containers and labelled according to South African regulations and guidelines.

### Relevant classification and H-Statements:

Not classified.

### Key to Abbreviations

<b>AND</b>	European Provisions concerning the International Carriage of Dangerous Goods by inland Waterways
<b>ADR</b>	The European Agreement concerning the International Carriage of Dangerous Goods by Road
<b>ATE</b>	Acute Toxicity Estimate
<b>COD</b>	Chemical Oxygen Demand

<b>GHS</b>	Globally Harmonised System of Classification and Labelling of Chemicals
<b>IATA</b>	International Air Transport Association
<b>ICAO</b>	International Civil Aviation Organisation
<b>IMDG</b>	International Maritime Dangerous Goods
<b>Log<sub>Pow</sub></b>	Logarithm of the octanol/water partition coefficient
<b>LD<sub>50</sub></b>	Lethal Dose 50
<b>LC<sub>50</sub></b>	Lethal Concentration 50
<b>RID</b>	The Regulations concerning the International Carriage of Dangerous Goods by Rail
<b>SDS</b>	Safety Data Sheet
<b>UN</b>	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).

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**END OF SAFETY DATA SHEET**