

Booster AS

SAFETY DATA SHEET

1. PRODUCT & COMPANY IDENTIFICATION

Product Name: Booster AS
Pesticide Classification: Adjuvant
UN No.: Not regulated.

Supplier

Enviro Bio-Chem (Pty) Ltd
Co. Reg. No.: 2013/194774/07
44 Kerk Street, Lichtenburg
North West, South Africa 2740

Registration Holder

RT Chemicals CC
Co. Reg. No.: CK 87/21925/23
44 Kerk Street, Lichtenburg
North West, South Africa 2740

Telephone: +27 87 231 7261
Fax: 086 541 7948
Website: www.envirobiochem.co.za

24 Hr Emergency Number: Bateleur: +27 83 123 3911

In case of Poisoning:

Poison Information Centre: +27 82 446 8946
Tygerberg Hospital: (+27 21) 931 6129
Poison Emergency Enquiries: (+27 21) 689 5227

Common Name: Ammonium Sulphate 500 g/l SL
Chemical Name: Ammonium Sulphate
Empirical Formula: $(\text{NH}_4)_2\text{SO}_4$
CAS No.: 7783-20-2
RSA Reg. No.: L6182 Act 36 of 1947
Namibia Reg. No.: N-AR 1468

2. COMPOSITION / INFORMATION ON INGREDIENTS

<u>Ingredient Name</u>	<u>Concentration</u>
Ammonium Sulphate	500 g/l

3. HAZARD IDENTIFICATION

Hazard Class: WHO Class III -Slightly hazardous.

Main Hazard: Ammonium sulfate exists as odorless, white to brownish-gray crystal. It presents little toxicity unless large amounts are ingested, in which case, vomiting and diarrhea are likely.

Flammability: Non-flammable and non-volatile when diluted for use.

Chemical Hazard: No specific chemical hazard to mention.

Biological Hazard: No specific biological hazard to mention.

4. FIRST AID MEASURES AND PRECAUTIONS

If poisoning is suspected, do not wait for symptoms to develop. Contact a physician, the nearest hospital, or the nearest Poison Control Centre.

Symptoms of Human Poisoning: Ingestion of large amounts may cause nausea and vomiting, diarrhea and increased urination. Persons with liver disease may be adversely affected by the ammonia.

Symptoms for inhalation other than mechanical irritation of the respiratory tract are unlikely to occur. A study of volunteers where a worst-case scenario depicting an ammonium sulfate spill and dispersion in air was simulated, and the volunteers (normal and asthmatics) showed little or no evidence of any adverse effects.

First Aid Measures:

Skin Contact: Quickly remove contaminated clothing. Rinse with flooding amounts of water to remove loose particulars. Wash exposed area with soap and water. For reddened, or blistered skin, consult a physician.

Eye Contact: Do not allow victim to rub or keep eyes tightly shut. Gently lift eyelids and flush immediately and continuously with flooding amounts of water until transported to an emergency medical facility. Consult a physician or ophthalmologist if pain or irritation persist.

Ingestion: Never give anything by mouth to an unconscious or convulsing person. Contact a poison control center. Unless the poison control center advises otherwise, have the conscious person drink 1 to 2 glasses of water. Induce vomiting. After first aid, get appropriate medical attention.

Inhalation: Remove exposed person to fresh air and support breathing as needed.

Advice to Physician: Treatment is symptomatic and supportive.

Antidote: There is no specific antidote for poisoning with this product.

5. FIRE FIGHTING MEASURES

Flammability: Not flammable. Water based product.

Extinguishing Agents: Use agents suitable for surrounding fire.

Firefighting: Do not release runoff from fire control methods to sewers or waterways. Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full facepiece operated in pressure demand or positive-pressure mode.

Special Hazards: Fires may generate poisonous and corrosive fumes containing nitrogen oxides, sulfur oxides, and ammonia.

6. ACCIDENTAL RELEASE MEASURES (SPILLAGE)

Personal Precautions: Review Section 5 and Section 7 before proceeding with clean-up. Use appropriate personal protection and equipment. Wear protective clothing. If necessary, wear a self-contained breathing apparatus.

Environmental Precautions: Do not contaminate ponds, waterways or ditches with the chemical or used containers. Do not product allow to enter drainage systems, surface or ground water. If the product enters watercourses or sewers or contaminate soil or plants, inform competent authority.

Small Spills: Do not sweep. Carefully scoop up and place in suitable containers for later disposal.

Large Spills: Clean up promptly. Dyke the spill. Prevent material from entering sewers, waterways or low-lying areas. Collect all damage containers ensuring that no further spillage occurs. Pump all excess spillage into sealed containers and dispose of according to local regulations. Flush the spill area with water to remove any residue but ensure that the contaminant does not enter any water system or come into contact with any desirable vegetation.

7. HANDLING AND STORAGE REQUIREMENTS

Handling: Harmful if swallowed. Avoid contact with skin, eyes and clothing. Do not leave the product in the applicator for long periods. Wash hands before eating, drinking, chewing gum, smoking, or using the toilet. Remove clothing immediately if the product gets inside, then wash skin thoroughly using a non-abrasive soap and put on clean clothing. Keep out of reach of children.

Storage: Store in original sealed containers, in a well-ventilated and dry storehouse. Store out of direct sunlight. Keep away from direct sunlight, open flames, food, seed, animals, children and uninformed persons. Store at temperature not exceeding 40 °C. Do not leave in applicators for extended periods.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

Occupational Exposure Limits (Ammonium Sulphate): PEL (OSHA)- 15 mg/m³ (total dust), 8hr. TWA.

Engineering Controls: Ensure adequate ventilation, especially in confined areas. Use outdoors in a well-ventilated area. Keep container tightly closed. Comply with occupational safety, environmental, fire, and other applicable regulations.

Administrative Controls: Workers with liver disease may be more susceptible than others to exposure of the ammonia in ammonium sulphate.

Personal Protective Equipment:

Clothing: Wear chemically protective gloves, boots, aprons and gauntlets to prevent prolonged or repeated skin contact.

Eye Protection: Wear protective eyeglasses or chemical safety goggles, per OSHA eye-and face-protection regulations (29 CFR 1910.133). Contact lenses are not eye protective devices. Make emergency eyewash station and washing facilities available in work area.

Respiratory: Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and if necessary, wear a MSHA/NIOSH-approved dust respirator. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination and pressure of sufficient oxygen. For emergency or non-routine operations (cleaning spills, reactor vessel or storage tanks), wear an SCBA. Air-purifying respirators do not protect workers in oxygen-deficient atmospheres. If respirators are used, OSHA requires a written respiratory protection program that includes at least medical certification, training, fit-testing, periodic environmental monitoring, maintenance, inspection, cleaning, and convenient, sanitary storage areas.

Other Protection: Do not eat, drink or smoke while handling this product. Prevent contamination of food, feeds, drinking water and eating utensils. After using this product wash hands and face before eating. Wash accurately (preferably a shower) after work shift. Wash hands during breaks and at the end of the work with soap and water.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Green liquid.

Odor: None

pH: 4.45

Boiling Point: 100 °C

Melting Point: Not applicable.

Flash Point: None

Flammability: Non-flammable

Explosive Properties: No information available.

Oxidizing Properties: Corrosive to metal.

Solubility in Water: Readily soluble in water.

10. STABILITY AND REACTIVITY

Stability: Stable for up to 2 years under normal warehouse and field conditions.

Conditions to Avoid: None to specifically mention.

Incompatible Materials: Do not physically mix concentrate directly with other herbicides or pesticides concentrates. Always dilute first.

Decomposition Products: Products will decompose to ammonia, nitrogen, sulfur and water at very high temperatures.

11. TOXICOLOGICAL INFORMATION

Acute toxicity based on active ingredient toxicity.

Acute Oral Toxicity LD₅₀ (rat): 4 250 mg/kg

Acute Dermal Toxicity LD₅₀ (rat): >5 000 mg/kg

Acute Inhalation LC₅₀ (rat, 4hr): 13.11 mg/l air

Skin Irritation (rabbit): Mildly irritating to skin. Moderately toxic if absorbed through the skin.

Eye Irritation (rabbit): Severely irritating.

Sensitizing Effects (guinea pig): The product is considered to be a skin sensitizer.

Chronic Effects: None reported.

Carcinogenicity: LARC, NTP and OSHA do not list ammonium sulfate as a carcinogen.

Mutagenicity: Animals studies did not detect mutagenicity effects. No human information available.

Teratogenicity: Animals studies did not detect mutagenicity effects. No human information available.

Reproductive Hazards: None reported.

12. ECOLOGICAL INFORMATION

Ecotoxicity is based on the active ingredient toxicity.

Aquatic Toxicity Fish LC₅₀ (96 hr): 215.21 mg/l (Brachydanio rerio). May pose a hazard to fish.

Aquatic Toxicity Daphnia LC₅₀ (48 hr): 283.74 mg/l (Daphnia Similis)

Aquatic Toxicity Algae EC₅₀ (96 hr): 505 mg/l (Selenastrum capricornutum).

Avian Toxicity Bird LD₅₀: >10 000 mg/kg (bobwhite quail). Practically non-toxic to birds.

Toxicity Bees: Non-toxic to bees.

13. DISPOSAL CONSIDERATION

Pesticide Disposal: Emptied containers retain dust and product residues. Observe all labelled safeguards until container is reconditioned or destroyed. Do not contaminate crops, grazing, rivers or dams with chemical or used container. Do not allow material to contaminate ground water system. Dispose of waste from residues / unused product in accordance with national regulations. Waste must be incinerated in a suitable incineration plant.

Package Product Wastes: Triple rinse (or equivalent) the container. Then offer for recycling or reconditioning or puncture and dispose of in a sanitary landfill or incineration plant. Do not contaminate ponds, waterways or ditches with chemical or used container. Do not reuse empty container.

14. TRANSPORT INFORMATION

UN No.: Not regulated.

Class: Not regulated.

Packaging Group: Not regulated.

Proper Shipping Name: Not regulated.

15. REGULATORY INFORMATION

Risk Phrases: **R16-** Explosive when mixed with oxidizing substances.
 R21/22- Harmful in contact with skin and if swallowed.
 R36/37/38- Irritating to eyes, respiratory system and skin.
 R52- Harmful to aquatic organisms.

Safety Phrases: **S2-** Keep out of the reach of children.
 S14- Keep away from incompatible materials, oxidizers.
 S24/25- Avoid contact with skin and eyes.
 S36/37/39- Wear suitable protective clothing, gloves and eye/face protection.
 S29/35- Do not empty into drains, dispose of this material and its container in a safe way.
 S61- Avoid release to the environment. Refer to special instructions/safety data sheets.

National Legislation: This product is registered under Act 36 of 1947 of the Republic of South Africa. It is a violation of South African law to use this product in any manner inconsistent with its approved labelling. Read and follow all label directions.

16. OTHER INFORMATION

Note: Read and understand all the information on the product label before using the product.

Disclaimer: The information on this sheet is not a specification; it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage and use of the product. It is not applicable to unusual or non-standard uses of the product, nor where instructions or recommendations are not followed.

All information is given in good faith but without guarantee in respect of accuracy, and no responsibility is accepted for errors and omissions or the consequence thereof.

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