

Safety Data Sheet (SDS) MULP WS/03

Page 1 of 9

According to UN GHS 9th Ed
Revision Date: 2023/04/13

First print date: 2015/01/12

Version: 2.0

SECTION 1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY/UNDERTAKING

Product identifier:

Identification as on the label/Trade name: **AGRO-XPLODE**

Additional information: Product code MULP WS/03

Relevant identification uses of the substance and uses advised against:

Identified uses: Fertilizer.

Uses advised against: Use only as directed.

Details of the supplier of the Safety Data Sheet:

AECI Limited
14 Field Road, LILANTON

Emergency telephone numbers:

Griffon Poison information centre: 082 446 8946
Poisons Information Helpline: 0861 555 777
AECI Limited: (011) 823 8000 (o/h) Spill Tech: 086 100 0366 (a/h)

SECTION 2. HAZARD IDENTIFICATION

Classification of the substances or mixture

The mixture is classified according to:

SANS 10234:2019, Regulation EC 1272/2008 [EU-GHS/CLP]	
Hazard classes/Hazard categories	Hazard statement
Reproductive toxicity (Category 2)	H361

For full text of H statements see section 16

The most important adverse effects

The most important adverse physiochemical effects: None.

The most important adverse human health effects: May cause skin and eye irritation.

Safety Data Sheet (SDS) MULP WS/03

Page 2 of 9

According to UN GHS 9th Ed

Revision Date: 2023/04/13

[Label elements](#)

Hazard pictograms:



Signal Word: WARNING

Hazard Statements: H361 Suspected damaging fertility or the unborn child.

Precautionary Statements: P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children. P203 Obtain, read and follow all safety instructions before use. P260 Do not breathe dust/mists. P263 Avoid contact during pregnancy. P264 Wash hands thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P280 Wear protective gloves/protective clothing/eye protection/face protection. P318 if exposed or concerned, get medical advice.

Special labelling of certain mixtures: None.

Other hazards: None.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture: Mixture

Ingredients:

Substance name (IUPAC/EC)	CAS –No.	Concentration % By weight	Classification
	EC-No.		EC1272/2008
Potassium nitrate	7757-79-1	40-45%	*Oxidising solid (Category 3) H272.
	231-818-8		
Ammonium pentaborate tetrahydrate	12046-04-7	0.1-<1%	Reproductive toxicity (Category 2) H361.
	601-709-3		

For full text of H statements see section 16

* Based on the negative oxidising test results of a similar product containing >60% potassium nitrate; **Agro-Xplode is not classified as an oxidizing solid.**

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4. FIRST AID MEASURES

Description of first aid measures:

In case of inhalation: If breathed in, move person into fresh air. If not breathing, give artificial respiration. Get medical attention if irritation persists.

Safety Data Sheet (SDS) MULP WS/03

Page 3 of 9

According to UN GHS 9th Ed

Revision Date: 2023/04/13

In case of skin contact: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention if irritation occurs.

In case of eye contact: Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention if irritation persists.

In case of ingestion Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical if you feel unwell.

Most important symptoms and effects, both acute and delayed:

Symptoms of accidental over-exposure to high doses of inorganic borate salts have been associated with ingestion or absorption through large areas of severely damaged skin. These may include nausea, vomiting, and diarrhoea, with delayed effects of skin redness and peeling.

Inhalation: High dust concentrations may cause irritation of the nose and upper respiratory tract with symptoms such as sore throat and coughing.

Ingestion: May be harmful if swallowed, causing nausea, vomiting and cramps.

Skin contact: Avoid contact when active dermatitis, cuts or abrasions are present.

Eye contact: May cause eye irritation.

Indication of any immediate medical attention and special treatment needed:

Note to physicians: Supportive care only is required for adult ingestion of less than a few grams of the product. For ingestion of larger amounts, maintain fluid and electrolyte balance and maintain adequate kidney function. Gastric lavage is only recommended for heavily exposed, symptomatic patients in whom emesis has not emptied the stomach. Haemodialysis should be reserved for patients with massive acute absorption, especially for patients with compromised renal function. Boron analyses of urine or blood are only useful for verifying exposure and are not useful for evaluating severity of poisoning or as a guide in treatment.

SECTION 5. FIRE -FIGHTING MEASURE

Extinguisher media:

Suitable extinguisher media: Use an extinguishing agent suitable for the surrounding fire: use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable extinguishing media: Do not use high volume water jet, due to contamination risk.

Special hazards arising from the mixture:

Ambient fire may liberate hazardous vapours. Fire may cause evolution of boron compounds.

Advice for fire-fighters:

Evacuate area and contact emergency services. Toxic gases may be evolved in a fire situation. Remain upwind and notify those downwind of hazard. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire.

SECTION 6. ACCIDENTAL RELEASE

Personal precautions, protective equipment and emergency procedures:

Safety Data Sheet (SDS) MULP WS/03

Page 4 of 9

According to UN GHS 9th Ed

Revision Date: 2023/04/13

Follow safe handling advice and personal protective equipment. Prevent formation of dust.

For non-emergency personnel: No action shall be taken involving any personal risk or without suitable training. Isolate area. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk-through spilt material. Avoid breathing dust. Provide adequate ventilation.

For emergency responders: Isolate area. Keep unnecessary and unprotected personnel from entering the area. Avoid inhalation of dust. Refer to Section 7, Handling, for additional precautionary measures. Use appropriate safety equipment. For additional information, refer to Section 8, Exposure Controls and Personal Protection

Environmental precautions:

Prevent entry into sewers, basements or confined areas.

Methods for containment and cleaning up:

For small spills Contain spilled material, if possible, sweep or vacuum prevent dust formation. Collect in suitable and properly labelled containers. Absorb washings with materials such as: sand, earth, vermiculite or diatomaceous earth.

For large spills Prevent entry into sewers, water courses, basements or confined areas. Shovel or vacuum spilled material, prevent dust formation. Contain washings and collect spillage with non-combustible, absorbent material e.g., sand, earth, vermiculite or diatomaceous earth and place in well labelled container for disposal according to local regulations.

Reference to other sections:

See section 7 for information on safe handling.

See section 8 for information on personal protection equipment.

See section 13 for information on disposal.

Additional information:

None.

SECTION 7. HANDLING AND STORAGE

Precautions for safe handling:

Avoid contact with skin and eyes. Avoid formation of dust. Provide appropriate exhaust ventilation at places where dust is formed. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas.

Protective measures: Observe directions on label and instructions for use.

Advice on general occupational hygiene: Do not eat drink or smoke when handling this product.

Conditions for safe storage, including incompatibilities:

Keep locked up. Keep container tightly closed. Keep only in the original container in a cool, well-ventilated place. Keep container dry. Air and moisture sensitive.

Specific end uses:

Use as directed. Use original container.

Safety Data Sheet (SDS) MULP WS/03

Page 5 of 9

According to UN GHS 9th Ed

Revision Date: 2023/04/13

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters:

Occupational exposure limits (OEL): No information available.

Biological exposure indices (BEI): No information available.

Additional exposure limits under the conditions of use: No information available.

Exposure control: Only use in a well-ventilated area. Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of the hazardous substances handled.

Appropriate engineering controls: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. A Risk Assessment should be conducted before handling is to commence to determine specific exposure control.

Hygiene measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection: Wear chemical goggles when using this product.

Hand protection: Use chemical resistant gloves. Examples of preferred glove barrier materials include Nitrile/butadiene rubber, Polyethylene, Ethyl vinyl alcohol laminate, Polyvinyl alcohol, Polyvinyl chloride.

Body protection: Wear appropriate clothing for task or operation. Keep working clothes separately.

Respiratory protection: If respiratory protection is required; use an approved air-purifying respirator. Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines.

Environmental exposure controls: Prevent product from entry into sewers and water courses.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance (form): Granular powder.

Colour: Light pink.

Odour: Odourless.

Odour threshold: Not applicable.

pH: 5.0-6.0 (1 % tap water).

Melting point/range (°C): No information available.

Boiling point/range (°C): No information available.

Safety Data Sheet (SDS) MULP WS/03

Page 6 of 9

According to UN GHS 9th Ed
Revision Date: 2023/04/13

Flash point (°C): Not applicable: inorganic substance.

Evaporation rate: No information available.

Flammability (solid, gas): No information available.

Ignition temperature (°C): No information available.

Upper/lower flammability/explosive limits: No information available.

Vapour pressure (25°C): No information available.

Vapour density: No information available.

Bulk density: 1.05-1.10 g/mL.

Water solubility (g/l) at 25°C: Fully soluble (2% dilution).

n-Octanol/Water partition coefficient: No information available.

Auto-ignition temperature: No information available.

Decomposition temperature: No information available.

Kinematic viscosity: Not applicable: solid substance.

Physical hazards:

Oxidising properties: Not an oxidiser based on a similar product tested.

Other information:

Fat solubility (solvent-oil to be specified): No information available.

Dissociation constant in water (p Ka): No information available.

Oxidation-reduction potential: No information available.

SECTION 10. STABILITY AND REACTIVITY

Reactivity:

The product is stable under normal conditions.

Chemical stability:

The product is stable under normal conditions.

Possibility of hazardous reactions:

Safety Data Sheet (SDS) MULP WS/03

Page 7 of 9

According to UN GHS 9th Ed

Revision Date: 2023/04/13

When heated strongly it melts and decompose releasing toxic fumes. Violent reaction or explosion may occur in cases of confinement of the product.

Conditions to avoid:

Heat and high temperatures.

Incompatible materials:

Reactive with combustible materials, organic materials. Slightly reactive to reactive with reducing agents.

Hazardous decomposition products:

These products are carbon oxides (CO, CO₂), nitrogen oxides (NO, NO₂...), and phosphates. Some metallic oxides.

SECTION 11. TOXICOLOGICAL INFORMATION

Toxicokinetics, metabolism and distribution:

Non-human toxicological data: No Information available.

Information on toxicological effects:

Acute toxicity:

Potassium nitrate:

Acute toxicity oral rat LD₅₀ 4532 mg/kg.

Chronic toxicity: No information available.

Skin corrosion/irritation: No information available.

Eye corrosion/irritation: No information available.

Respiratory or skin sensitization: No information available.

Germ cell mutagenicity: No information available.

Carcinogenicity: No information available.

Reproductive toxicity: No information available.

STOT-single exposure: No information available.

STOT-repeated exposure: No information available.

Aspiration hazard: No information available.

SECTION 12. ECOLOGICAL INFORMATION

Toxicity:

No information available.

Safety Data Sheet (SDS) MULP WS/03

Page 8 of 9

According to UN GHS 9th Ed

Revision Date: 2023/04/13

Persistence and degradability:

The nitrate ion is the predominate form of plant nutrition. It follows the natural nitrification/denitrification cycle to give nitrogen.

Bioaccumulative potential:

No information available.

Mobility in soil:

Very soluble in soil.

Results of PBT& vPvB assessment:

No information available.

Other adverse effects:

No information available.

SECTION 13. DISPOSAL CONSIDERATIONS

Waste treatment methods:

Consider suitable waste recycling, re-use or recovery options. Dispose of in accordance with municipal, provincial and national regulations. Waste Classification and Management Regulations (GN 634 of 2013). Dispose and or manage in accordance with the requirements contained in R634 Waste Classification & Management Regulations, R635 National Norms & Standards for the Assessment of Waste for Landfill Disposal and R636 National Norms & Standards for Disposal of Waste to Landfill.

Product/ packaging disposal:

Treat as hazardous waste and dispose of in accordance with municipal, provincial and national regulations.

SECTION 14. TRANSPORT INFORMATION

	Land transport (ADR/RID)	Sea transport (IMDG)	Air transport (ICAO/IATA)
UN-Number	Not required	Not required	Not required
UN Proper shipping name:	Not required	Not required	Not required
Transport hazard class:	Not required	Not required	Not required
Packaging group:	Not required	Not required	Not required
Marine pollutant:	No	No	No
Special precautions for user:	Not required	Not required	Not required
Transport in bulk according to MARPOL 73/78 Annex II and the IBC code	No information	No information	No information

Inland waterways: Not required.

Emergency response information: Not known.

SECTION 15. REGULATORY INFORMATION

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

Relevant information regarding authorization: Occupational Health and Safety Act 1993. Regulation for Hazardous Chemical Agents, 2021. UN Recommendations on the Transport of Dangerous Goods Model Regulations Rev. 21 (2019), Globally Harmonized System of Classification and Labelling of Chemicals (GHS) Rev 9, 2021.

Safety Data Sheet (SDS) MULP WS/03

Page 9 of 9

According to UN GHS 9th Ed

Revision Date: 2023/04/13

ACGIH: American Conference of Governmental Industrial Hygienists (ACGIH)

Relevant information regarding restrictions: None.

EU regulations: Regulation EC 1272/2008 [EU-GHS/CLP] and EU directives 67/548/EEC or EC 1999/45/EC.

Other National regulations: National Road Traffic Act, 1996 (ACT NO. 93 of 1996).

SANS 10228:2012- The identification and classification of dangerous goods for transport by road and rail modes.

National Environmental Management: Waste Act 59 of 2008.

Chemical Safety Assessment carried out? No

SECTION 16. OTHER INFORMATION

Indication of changes:

All sections.

Relevant classification and H statements (number and full text):

H272 May intensify fire; oxidiser. H361 Suspected of damaging or the unborn child.

Training instructions:

Use as indicated on the label, special training may be required for application.

Further information:

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

Notice to readers:

Employers should use this information only as a supplement to other information gathered by them and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees.

This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.