



Profert (Pty) Ltd
Material Safety Data Sheet (MSDS)

1. Product and Company identification

Identification of the substance or preparation

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| Product name | - Mono Ammonium Phosphate | Serial Number : P021 |
| Material uses | - Fertilizer | Date issued : Jan 2012 |
| Synonyms | - Mono Ammonium Phosphate, MAP 33, Mono Ammonium Phosphate (Technical grade), MAP 38, Mbonaphos | Pages : 4 |
| Supplier address | - Profert (Pty) Ltd 43 Ross Street Potchefstroom 2531 Tel nr : +27 18 293 3530 | |

2. Composition / Information on ingredients

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| Composition | - Nitrogen > 10.7%, Phosphorous > 21.5% for MAP Fertilizer grade, 96 to 99% assay for Technical Grade MAP. |
| Molecular formula | - $NH_4H_2PO_4$ |
| Appearance | - Colourless to white, fine crystals. |

3. Hazards identification

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| Effects and symptoms | - Hazardous in case of contact with skin, eyes, inhalation and/or ingestion. |
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4. First Aid measures

Specific immediate treatment

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| Inhalation | - If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention if symptoms appear. |
| Ingestion | - Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If not unconscious wash out mouth with water and give a cup of water to drink. Get medical attention if symptoms appear. |
| Skin contact | - In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms appear. |
| Eye contact | - In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Check for and remove any contact lenses. Get medical attention if symptoms appear. |

5. Fire-fighting measures

Suitable

Special fire-fighting procedures - Oxidizing material. Evacuate surrounding areas. Use flooding quantities of water. Avoid contact with organic materials.

Protection of fire-fighters - Fire-fighters should wear positive pressure self-contained breathing apparatus (SCBA) and full turnout gear.

6. Accidental release measures

Personal Precautions - Avoid breathing dusts. Use only with adequate ventilation. Wear suitable protective clothing.

Environmental precautions and clean-up methods - Shovel into convenient and well labelled containers for disposal.

7. Handling and Storage

Handling - Do not ingest. Do not breathe dust. If ingested, seek medical advice immediately and show the container or the label.

Storage - Keep container tightly closed. Keep container in a cool, well-ventilated area. Store and use away from organic materials, reducing agents, moisture and powdered metals.

Packaging materials - Use original container.

8. Exposure Controls / Personal Protection

Engineering measures - Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Hygiene measures - Wash hands after handling compounds and before eating, smoking, using lavatory and at the end of the day.

Skin and body protection - Full length chemical resistant overalls / apron, dust mask.

Hand protection - Gloves (Impervious)

Eye protection - Use dust goggles / masks.



9. Physical and chemical properties

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| Appearance | - Colourless to white, fine crystals for Technical Grade MAP. Off-white to brownish for MAP Fertilizer Grade. |
| Soiling Point | - 190 °C decomposes as Technical Grade MAP |
| Molecular mass | - 115.03 kg / dm ³ as Technical Grade MAP |
| Solubility | - Soluble in water 37g / 100g NH ₄ H ₂ PO ₄ at 20 °C as Technical Grade MAP |

10. Stability and Reactivity

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| Stability | - The product is stable. Hygroscopic, absorbs moisture from the air. Avoid contact with moisture. Slow hydrolysis will produce corrosive acid. |
| Hazardous reaction | - Contact with strong bases, Magnesium(Mg) or heat may form ammonia. |

11. Toxicological information

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| Potential acute health effects | |
| Eye contact | - May cause irritation from abrasion. |
| Skin contact | - May cause irritation from abrasion. |
| Inhalation | - Dust may irritate nose, throat and the respiratory tract which may cause coughing and choking. |
| Ingestion | - Swallowing large amounts may cause vomiting and cramps. |
| Long term exposure | - No known side effects have been associated with repeated or prolonged exposure. |

12. Ecological information

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| Users should ensure that they comply with local, provincial and national environmental legislation. | |
| Environmental affects, behaviour and fate | - Toxic to aquatic organisms in low concentrations. |

13. Disposal considerations

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| Method of disposal | - Waste must be disposed of in accordance with local, provincial and national environmental control regulations. Recover, reclaim or recycle if practicable. |
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14. Transport information

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| CAS number | - 7722-76-1 |
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15. Regulatory information

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| Risk phrases | - Contact with combustible material may cause fire. Explosive when mixed with combustible material. |
| Safety phrases | - Keep away from combustible material. This material and its container must be disposed of as hazardous waste. |
| Users should ensure that they comply with any relevant local, provincial and national legislation. | |

16. Other information

This MSDS summarises at the date of issue our best knowledge of the health, safety and environmental hazard information related to the product and in particular how to safely handle, use, store and transport the product. Since Profert (Pty) Ltd cannot anticipate or control the conditions under which the product may be handled, used, stored or transported, each user must, prior to usage, review this MSDS in the context of how the user intends to handle, use, store or transport the product and beyond, and communicate such information to all relevant parties.

We shall not assume any liability for the accuracy or completeness of the information contained herein or any advice given unless there has been gross negligence on our part. Profert (Pty) Ltd emphasizes safe use of all materials, promotes sustainable practices and encourages preservation of the environment.