



MSDS - MonoAmmonium Phosphate F.G.

Issued February 28, 2007

Section 1. Product Information

Product Name: Monoammonium Phosphate Feed Grade 24.0%

Synonym: MAPFG

Use: Animal Feed

Distributed by Pestell Minerals & Ingredients, New Hamburg, ON Canada

24 Hour Emergency Telephone (Canutec): 613-996-6666

Section 2. Hazardous Ingredients

Monoammonium Phosphate (82% wt/wt) CAS No. 7722-76-1

OSHA PEL (mg/m³): 15/5 TLV-TWA (mg/m³): 10/3

Calcium, magnesium, iron and aluminum sulfates, phosphates and silicates: 17% by wt.

Fluorides, as F: OSHA PEL: 2.5 TLV-TWA: 2.5

Section 3. Physical Data

Appearance and Odor: Odorless grey granular solid

Melting Point: 190°C

Bulk Density, loose: 56 - 59lbs/ft³

Vapor Pressure, <1mm Hg @ 20°C

Specific Gravity, H₂O=1: 1.8

Solubility in Water: 328 g/L @ 20°C

Percent Volatile: Not available

pH, 4.2 in 0.2M solution

Evaporation Rate: Not applicable

Section 4. Fire and Explosion Hazard Information

Flash Point: Not applicable

Flammable Limits: Not applicable

Extinguishing Media: Chemical type foam, CO₂, dry chemical, water fog

Unusual Fire and Explosion Hazard: MAP is a non flammable inorganic salt and is not flammable, however, when strongly heated MAP will decompose give off ammonia.

Special Fire Fighting Procedures and Equipment: Keep personnel removed from and upwind of fire. Wear full fire fighting turn out gear (bunker gear) and respiratory protection (SCBA).

Section 5. Reactivity Data

Stability: This product is stable under normal conditions of storage, handling and use.

Hazardous Polymerization: Will not occur

Conditions to Avoid: Welding or hot work on equipment or plant which may have contained fertilizer should not be done without first washing thoroughly to remove all fertilizer.

Materials to Avoid: Alkalis, strong acids, copper and its alloys

Hazardous Decomposition Products: Ammonia is released upon reaction with strong bases or from thermal decomposition.

Section 6. Toxicological Properties

Potential Acute Health Effects

Eyes and Skin: Contact may cause eye irritation and prolonged contact with skin may cause some irritation.

Inhalation: High dust concentrations of air borne material may cause irritation of the nose and upper respiratory tract with symptoms such as sore throat and coughing. Inhalation of decomposition gases can cause irritation and corrosive effects on the respiratory system. Some lung effects may be delayed.

Ingestion: Ingestion of small quantities are unlikely to cause toxic effect. Large quantities may give rise to gastro intestinal disorders.

Potential Chronic Health Effects: No adverse effects are known

Toxicological Information

Significant Routes of Exposure: Eyes, skin, respiratory system, digestive tract.

Toxicity to Animals

Acute Oral Toxicity: (Rat) OECD Guideline 425: LD50>2,000 mg/kg bw

Acute Inhalation Toxicity: No data

Acute Toxicity Other Routes: No data

Acute Dermal Toxicity (Rat): OECD Guideline 402: LD50 >5,000 mg/kg bw

Repeated Dose Toxicity: No data

Eye Irritation/Corrosion: Mild irritant

Skin Irritation/Corrosion: Mild irritant

Special Remarks on Toxicity to Animals

Low to very low toxicity based on the standard Federal Fungicide and Rodenticide Act (FIFRA) ratings for mammals.

Developmental Toxicity/Teratogenicity: No data

Non Bacterial Genetic Toxicity in-Vitro: Chromosomal Aberration: No data

Toxicity to Reproduction: No data

Carcinogenicity: No data

Ecological Information

Ecotoxicity: Slightly toxic to practically non toxic to aquatic organisms based on the Federal Insecticide Fungicide and Rodenticide Act (FIFRA) acute toxicity ratings

Acute Toxicity to Fish: (Oncorhynchus mykiss) 96 hr LC50: =>85.9 mg/L

Chronic Toxicity to Fish: No data

Acute Toxicity to Aquatic Invertebrates: No data

Toxicity to Aquatic Plants/Bacteria/Soil Dwelling Organisms/Terrestrial Plants: No data

Environmental Fate: Stability in Water and Soil: Stable

Transport and Distribution: Calculated, fugacity level III 3.98×10^{-12} to 1ir, 45.3% to water, 54.6% to soil, 0.0755% to sediment. Phosphates, whether water.

Section 7. Preventive Measures

Exposure Controls/Personal Protection

Engineering Control: Avoid high dust concentration and provide ventilation where necessary

Eye Protection: Wear tight fitting goggles in dusty areas to reduce dust exposure to the eyes.

Protective Clothing: Wear suitable gloves when handling this product over long periods. If skin irritation occurs, wear long sleeves.

Respiratory Protection: Wear NIOSH approved respiratory protective equipment when exposure exceeds the OSHA nuisance dust standards of 15 mg/m³ or the ACGIH nuisance dust limit of 10 mg/m³ for the eight hour time weighted average. When stored in closed areas, a self contained breathing apparatus is required to protect against ammonia gas.

Other Protective Clothing or Equipment: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.

Handling and Storage

Ventilation: Use with adequate ventilation

Handling: Use appropriate personal protective equipment as specified in Section 8. Avoid excessive generation of dust and avoid unnecessary exposure to the atmosphere to prevent moisture pick up

Storage: Store in dry, well ventilated area, away from potential sources of heat and fire.

Product Disposal

Dispose of waste at an appropriate waste disposal facility according to applicable laws and regulations.

Collect in appropriate containers. Dispose of at an appropriate waste disposal facility in accordance with current applicable laws and regulations and product characteristics at time of disposal.

Section 8. First Aid Measures

Eyes: Immediately flush eyes (holding eyelids apart) with plenty of water for at least 15 minutes. Get medical attention if irritation develops or persists.

Skin: Wash skin thoroughly with soap and water

Ingestion: Do not induce vomiting. Drink large amounts of water (or milk if available) to dilute stomach contents. Small quantities are unlikely to cause toxic effect. Get medical attention if a large amount of MAP is ingested (small children more than 50g).

Inhalation: Remove from source of exposure to dusts. Obtain medical attention if the effects occur.

Persons who have inhaled decomposition gases (i.e. in a fire) should obtain immediate medical attention.

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