CHENGDU HUARONG INTERNATIONAL TRADE CO., LTD.

Address: 2-3F, No.166 LinYang Road, JiuChi Town, Pengzhou, Sichuan, China

MATERIAL SAFETY DATA SHEET (MSDS) Di Ammonium Phosphate (DAP)

Not classified as hazardous

SECTION I PRODUCT INFORMATION

TRADE NAME: Diammonium Phosphate

NBALL..CON **COMMON NAME:** Dibasic Ammonium Phosphate

Secondary Ammonium Phosphate

Diammonium Hydrogen Phosphate

HMIS RATING: Health Hazard-1

Fire Hazard-0

Reactivity Hazard-0 Specific Hazard-none

C.A.S. NUMBER: 7783 - 28 - 0

CHEMICAL FAMILY: Ammonium Phosphates

SECTION II INGREDIENTS

FORMULA:

COMPOSITION: Phosphate as P2O5, Nitrogen as N, Water

SECTION III HAZARD IDENTIFICATION

CLASSIFICATION: Non-Toxic

EMERGENCY CONCERNS: None Established

PRECAUTIONARY MEASURE:

Avoid breathing dust

Avoid ingestion

Avoid excessive contact with eyes

Use in adequate ventilation

OVEREXPOSURE CONDITIONS: Acute: Unknown

Chronic: Unknown

SECTION IV FIRST AID MEASURES

IMMEDIATE TREATMENT:

If in eyes: Flush with plenty of water for at least 15 minutes. Get medical attention as soon as possible.

If on skin: Wash contaminated area with soap or mild detergent and water. If chemical or solution soaks through clothing, remove clothing in area and wash contaminated skin as above. If irritation persists after washing, seek medical attention.

If inhaled: Move to fresh air. Treat symptomatically. Get medical attention promptly.

If ingested: Give large quantities of water to patient if conscious. Induce vomiting and seek medical attention.

FIRST AID TREATMENT: Same as above

A NOTE TO PHYSICIAN: Not applicable

SECTION V FIRE FIGHTING MEASURES

FLASH POINT: Not applicable

FIRE FIGHTING HAZARDS: NH₃ fumes may be released

APPROPRIATE EXTINGUISHING MEDIA: Small fires: Water spray, foam, dry chemical or CO₂

Large fires: Water spray, fog or foam

SPECIFIC PROTECTIVE EQUIPMENT: Wear self-contained breathing apparatus with full protective clothing

SECTION VI ACCIDENTAL RELEASE MEASURES

CONTROLLING SPILLS: Small spills: Carefully shovel material into dry

container. Remove from site.

Large spills: Use same procedure as above. Contact proper

local, state, or federal regulatory agency (ies) to ascertain

proper disposal techniques and procedures.

PPE: Wear respiratory equipment to avoid breathing dust.

SECTION VII HANDLING AND STORAGE

STORAGE CONDITIONS: None Listed

HANDLING PROCEDURES: Avoid contact with eyes, skin, and clothing. Wash thoroughly

after handling. Maintain proper hygiene practices when

handling this product.

SECTION VIII EXPOSURE CONTROLS / PPE

EXPOSURE LIMITS: OSHA Permissible Exposure Limits (PEL): Unknown

ACGIH Threshold Limit Value (TLV): Unknown

PPE: Respiratory Protection: Single use dust respirator

Skin Protection: Protect open wounds

Eye Protection: Eye protection should be worn at all times.

ENGINEERING CONTROLS: None established

SECTION IX PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE / ODOR / COLOR: Brown, granulated solid material with slight odor.

BOILING POINT(°F): Not applicable

MELTING POINT (°F): Not applicable

VAPOR PRESSURE (mmHg): Not applicable

SPECIFIC GRAVITY $(H_2O = 1)$: 1.82

% VOLATILE BY VOLUME: Not applicable

VAPOR DENSITY: Not applicable

SOLUBILITY IN WATER: 20°C 87.0%

EVAPORATION RATE (BUTYL ACETATE = 1): Not applicable

MOLECULAR WEIGHT: 132.05

PHYSICAL STATE: Solid

DENSITY - BULK: Packed) 63.61lbs./ft3

pH: (1% Sol.) 7.3

SECTION X STABILITY AND REACTIVITY

STABILITY: Stable

HAZARDOUS POLYMERIZATION: Will not occur

CONDITIONS AND MATERIALS TO AVOID: Extreme temperatures

HAZARDOUS DECOMPOSITION PRODUCTS: Extreme temperatures such as a fire causes formation of toxic fumes of PO_x and NH₃

SECTION XI TOXICOLOGY INFORMATION

PRODUCT TOXICOLOGICAL DATA: Mammalian:

Oral LD₅₀ OECD Guideline 425 (rat): >2,000 mg/kg

Dermal LD₅₀ OECD Guidelines 402 (rat): >5,000 mg/kg

Not found to be toxic by oral exposure as defined by OSHA. Based on toxicity data for other ammonium compounds (i.e., ammonium nitrates), not expected to be toxic by dermal exposure as defined by OSHA.

SECTION XII ECOLOGICAL INFORMATION

ECOTOXICOLOGY:

Aquatic:

Fish 96 hour LC50: >31 - 1,506.3mg/L

Algae, OECD Guideline 201 (green algae, Selenastrum)

No toxicity at up to 97.1 mg/L; stimulation observed at 6.41 mg/L and

higher. Non-toxic to aquatic organisms as defined by USEPA.

SECTION XIII DISPOSAL CONSIDERATIONS

WASTE DISPOSAL CONSIDERATIONS: Pick up with shovel and broom and broadcast as fertilizer using proper agriculture and soil management.

SECTION XIV TRANSPORT INFORMATION

SHIPPING NAME: Not regulated by D.O.T

HAZARD CLASS: Not applicable

D.O.T. NUMBER: Not applicable

SECTION XV REGULATORY INFORMATION

REPORTABLE QUANTITIES: Not on the 302 list of SARA reportable quantities

HAZ WASTE NO: None established

EPA REGISTER NO: None established

SECTION XVI OTHER INFORMATION

NONE LISTED

ENVIRONMENTAL IMPACT

No data available

This MSDS has been prepared from current technical data and summarises at the date of issue our best knowledge of the health and safety information of the product, and in particular how to safely handle and use the product in the workplace. Each user should read this MSDS and consider the information in the context of how the product will be handled and used in the workplace.

If clarification or further information is needed to ensure that an appropriate assessment can be made, the user should contact our company. Our responsibility for products sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available upon request

MMM CHEMBALL.