

1 - IDENTIFICATION

Product Name: DIT AgTech Urea Phosphate (UN1759)
Other Names: Not available
Product Code: DIT-IMPORT-UP
Uses: Fertilizer
Chemical Family: No data available
Chemical Formula: H₃PO₄.CO(NH₂)₂
Chemical Name: Urea Phosphate
CAS: 4861-19-2
Description: Fertilizer and Mineral for agricultural use

Contact Details of Manufacturer or Importer:

Direct Injection System Pty Ltd 1300 123 348
PO Box 2822, Toowoomba

Emergency Contact Details:

For emergencies only – DO NOT contact these companies for general advice

Organisation	Location	Phone
Poisons Information Centre Westmead, NSW		1800 251 525 131126
Chemcall	Australia	1800 127 406 +64 4917 9888

2 - HAZARD IDENTIFICATION

Poisons Schedule (Aust) Not Scheduled

Globally Harmonised System

Hazard Classification Hazardous according to the criteria of the Globally Harmonised System of Classification and Labelling of Chemicals (GHS)

Hazard Categories: Skin Corrosion/Irritant – Category 1B, H314

Signal word: Danger

Pictograms:


Hazard Statement: **H314** Causes severe skin burns and eye damage.

Precautionary Statements:
Prevention

P260 Do not breathe dust.

P280 Wear protective gloves/protective clothing/eye protection/face protection

Response

P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting

P303+P361+P353 IF ON SKIN (or hair): Remove/take off immediately all contaminated clothing. Rinse skin with water/shower.

P363 Wash contaminated clothing before reuse.

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P310 Immediately call a POISON CENTRE or doctor/physician

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Storage

P405 Store locked up.

Disposal

P501 Dispose of contents/container in accordance with local / regional / national / international regulations.

National Transport Commission (Australia)

Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

Dangerous Goods Classification Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

3 - COMPOSITION/INFORMATION ON INGREDIENTS
Ingredients

Chemical Entity	Formula	CAS Number	Proportion
Urea phosphate	No Data Available	4861-19-2	>=98%

4 - FIRST AID MEASURES**Description of necessary measures according to routes of exposure**

Swallowed	If swallowed: Rinse mouth and drink plenty of water, do NOT induce vomiting. Immediately call a Poison Centre or doctor/physician.
Eye	Eye contact: Immediately flush with running water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a Poison Centre or doctor/physician.
Skin	Skin contact: Remove contaminated clothing and shoes immediately. Flush skin with running water for at least 15 minutes. For minor skin contact, avoid spreading material onto unaffected skin. Immediately call a Poison Centre or doctor/physician. Wash contaminated clothing and shoes before reuse.
Inhaled	Remove victim to fresh air and keep at rest in position comfortable for breathing. Apply resuscitation if victim is not breathing. Do not use direct mouth-to-mouth method if victim ingested or inhaled the substance; use alternative respiratory method or proper respiratory device. Administer oxygen if breathing is difficult. Immediately call a Poison Centre or doctor/physician.
Advice to Doctor	Treat symptomatically. Inhalation of product may aggravate: respiratory tract irritation, coughing.

5 - FIRE FIGHTING MEASURES

General Measures	If safe to do so, move undamaged containers from fire area.
Flammability Conditions	Non-combustible. Material does not burn.
Extinguishing Media	Use an extinguishing agent suitable for surrounding fire.
Fire and Explosion Hazard	No information available.
Hazardous Products of Combustion	Fire or heat will produce irritating, toxic and/or corrosive gases. Thermal decomposition products: Ammonia, Carbon dioxide, Carbon monoxide, Nitrogen oxides, Phosphorus oxides.
Special Fire Fighting Instructions	Runoff from fire control or dilution water may be toxic and/or corrosive and pollute waterways.
Personal Protective Equipment	Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.
Flash Point	No Data Available
Lower Explosion Point	No Data Available

Upper Explosion Point No Data Available
Auto Ignition Temperature No Data Available
Hazchem Code 2X

6 - ACCIDENTAL RELEASES MEASURES

General Response

Procedure Ventilate enclosed spaces before entering. Do not touch or walk through spilled material. Avoid breathing dust.

Clean Up Procedures Avoid creating dusty conditions. Move containers from spill area. Vacuum or sweep up material and place in a designated, labelled waste container. Dispose of via a licenced waste disposal contractor.

Containment Stop leak if safe to do so. Prevent entry into waterways, drains or confined areas.

Decontamination No information available.

Environmental

Precautionary Measures Avoid dispersal of spilt material and runoff, and contact with soil, waterways, drains and sewers.

Evacuation Criteria Spill or leak area should be isolated immediately. Keep unauthorised personnel away.

Personal Precautionary Measures

Put on appropriate personal protective equipment (see section 8).

7 – HANDLING AND STORAGE

Handling Ensure an eye bath and safety shower are available and ready for use. Follow good personal hygiene practices and recommended procedures. Provide adequate ventilation. Avoid generation of dust. Put on appropriate personal protective equipment (see section 8). Do not breathe dust. Do not ingest. Do not get in eyes, on skin or clothing.

Storage Store in a dry, cool and well-ventilated area. Keep away from heat, sparks and flame. Protect from direct sunlight. Keep away from strong oxidising agents, reducing agents and bases. Keep container tightly closed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled container. Use appropriate containment to avoid environmental contamination.

Container Keep in the original container or an approved alternative made from a compatible material. Empty containers retain product residue and can be hazardous.

8 – EXPOSURE CONTROLS/PERSONAL PROTECTION

General	Derived No Effect Level (DNEL) Values for Urea phosphate (CAS No. 4861-19-2): -Workers, Local effects: Inhalation (repeated dose): 2.92 mg/m ³ -General population, Local effects: Inhalation (repeated dose): 0.73 mg/m ³
Exposure Limits	No Data Available
Biological Limits	No information available.
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, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
Personal Protection Equipment	Respiratory protection: Wear appropriate (approved/certified or equivalent) respirator when ventilation is inadequate. Hand protection: Wear protective gloves to prevent skin exposure. Eye/face protection: Wear protective safety glasses. Skin protection: Wear appropriate long-sleeved clothing to minimise skin contact.
Special Hazards Precautions	No information available.
Work Hygienic Practices	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.

9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Solid
Appearance	Crystalline powder
Odour	Odourless
Colour	White
pH	1.6-2.5 (1% aqueous sol.)
Vapour Pressure	No Data Available
Relative Vapour Density	No Data Available
Boiling Point	>200°C (at 1013hPa)
Melting Point	>200°C (at 1013hPa)
Freezing Point	No Data Available
Solubility	Soluble

Specific Gravity	No Data Available
Flash Point	No Data Available
Auto Ignition Temp	No Data Available
Evaporation Rate	No Data Available
Bulk Density	No Data Available
Corrosion Rate	No Data Available
Decomposition Temp	No Data Available
Density	1.77 g/cm ³
Specific Heat	No Data Available
Molecular Weight	No Data Available
Net Propellant Weight	No Data Available
Octanol Water Coefficient	No Data Available
Particle Size	No Data Available
Partition Coefficient	No Data Available
Saturated Vapour Conc	No Data Available
Vapour Temp	No Data Available
Viscosity	No Data Available
Volatile Percent	No Data Available
VOC Volume	No Data Available
Additional Characteristics	No Data Available
Potential Dust Explosion	No information available.
Fast or Intensely Burning Characteristics	No information available.
Flame Propagation or Burning Rate of Solid Materials	No information available.
Non-Flammables That Could Contribute Unusual Hazards to a Fire	No information available.
Properties that May Initiate or Contribute to Fire Intensity	Non-combustible. Material does not burn.
Reactions That Release Gases or Vapours	Fire or heat will produce irritating, toxic and/or corrosive gases.

Release of Invisible Flammable Vapours and Gases No information available.

10 – STABILITY AND REACTIVITY

General Information No information available.

Chemical Stability The product is stable under normal handling and storage conditions.

Conditions to Avoid Avoid high temperatures.

Materials to Avoid Avoid oxidising materials, reducing materials and alkalis.

Hazardous Decomposition Products Thermal decomposition products: Ammonia, Carbon dioxide, Carbon monoxide, Nitrogen oxides, Phosphorus oxides.
Dissociates into Urea and Phosphoric acid (corrosive) in aqueous media.

Hazardous Polymerisation Will not occur.

11 – TOXICOLOGICAL INFORMATION

General Information Irritant and corrosive effects:
-Inhalation: Causes burns to the respiratory tract. Symptoms may include irritation to the noses, throat and upper respiratory tract.
-Ingestion: Causes burns to the gastrointestinal tract. Symptoms may include severe burns of the mouth, throat and stomach. Ingestion of large quantities may cause gastrointestinal irritation, vomiting and diarrhoea.
-Skin contact: Causes burns to skin. May cause redness, pain, blisters and severe skin burns.
-Eye contact: Causes burns to eyes. Symptoms may include redness, pain, blurred vision, eye burns and permanent eye damage.
Chronic effects:
-Carcinogenicity: Not listed as a carcinogen or potential carcinogen.
-Mutagenicity: Negative in Ames tests.
-Reproductive toxicity: Unlikely to cause adverse effects on reproduction.

Acute Ingestion Acute Oral Toxicity:
-Rat L50: 2,600 mg/kg bw (OECD Guideline 423)

Carcinogen Category None

12 – ECOLOGICAL INFORMATION

Ecotoxicity Aquatic toxicity:
-Fish (Freshwater) (96h) LC50>9,100mg/L (Literature)
-Daphnia magna (Water flea) (48h) EC50>100mg/L (OECD Guideline 202)

-Desmodemus subscpicatus (72h) EC50>100mg/L (OECD Guideline 201)
 -Microcystis aeruginosa (192h) NOEC=47mg/L (Literature)
 -Aquatic micro-organisms (3h) EC50>100mg/L (OECD Guideline 209)
 Product is considered as practically non-toxic to aquatic organisms.

Persistence/Degradability	Urea phosphate completely dissociates in water forming Urea and Phosphoric acid. Urea is considered to be readily biodegradable as micro-organisms incorporate Urea into the Nitrogen cycle. Urea is also utilised as a Nitrogen source by terrestrial and aquatic plants. Phosphoric acid will dissolve in water and progressively dissociate.
Mobility	Urea and Phosphoric acid have low potential for adsorption.
Environmental Fate	Urea phosphate completely dissociates in water forming Urea and Phosphoric acid. Potentially local effects to aquatic organisms due to pH lowering of water.
Bioaccumulation Potential	Urea and phosphoric acid have a low potential for bioaccumulation based on physiochemical properties.
Environmental Impact	No Data Available

13 – DISPOSAL CONSIDERATIONS

General Information	Waste product/packaging must be disposed of in accordance with federal, state and local regulations. Empty containers should be taken for recycling, recovery or waste disposal.
Special Precautions for Land Fill	No information available.

14 – TRANSPORT INFORMATION

Land Transport (Australia)

ADG Code

Proper Shipping Name	CORROSIVE SOLID, N.O.S. (Urea Phosphate)
Class	8 Corrosive Substances
Subsidiary Risk(s)	No Data Available
EPG	37 Toxic And/Or Corrosive Substance, Non-Combustible
UN Number	1759
Hazchem	2X
Pack Group	II
Special Provision	No Data Available

Sea Transport

IMDG Code

Proper Shipping Name	CORROSIVE SOLIDS, N.O.S. (Urea Phosphate)
Class	8 Corrosive Substances
Subsidiary Risk(s)	No Data Available

UN Number 1759
Hazchem 2X
Pack Group II
Special Provision No Data Available
EMS F-A, S-B
Marine Pollutant No

**Air Transport
IATA DGR**

Proper Shipping Name CORROSIVE SOLIDS, N.O.S. (Urea Phosphate)
Class 8 Corrosive Substances
Subsidiary Risk(s) No Data Available
UN Number 1759
Hazchem 2X
Pack Group II
Special Provision No Data Available

National Transport Commission (Australia)

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Dangerous Goods

Classification Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road & Rail (ADG Code)

15 – REGULATORY INFORMATION

General Information No Data Available

Poisons Schedule (Aust) **Not Scheduled**

National/Regional Inventories

Australia (AICS) Not Listed

Canada (DSL) Not Listed

Canada (NDSL) Listed

China (IECSC) Listed

Europe (EINECS) 225-464-3

Europe (REACH) Registered

Japan (ENCS/METI) Not Listed

Korea (KECI) Not Listed

Malaysia (EHS Register) Not Listed

New Zealand (NZIoC) Listed

Philippines (PICCS)	Not Listed
Switzerland (Giftliste 1)	Not Determined
Switzerland (Inventory of Notified Substances)	Not Determined
Taiwan (NCSR)	Listed
USA (TSCA)	Listed

16 – OTHER INFORMATION

Related Product Codes	No Data Available
Revision	3.0
Revision Date	10 Feb 2023