



SAFETY DATA SHEET

KOCH FERTILISER AUSTRALIA PTY LTD

1. Identification

Product identifier Flutriafol-treated Ammonium Phosphate + Urea Blend

Other means of identification

Synonyms

Diammonium Phosphate 18-20-0 Flutriafol + Urea

* GAIN+s Flutriafol + Urea * Mono Ammonium Phosphate 10-22-0 Flutriafol + Urea

Recommended use of the chemical and restrictions on use

Recommended use Fertiliser.

Restrictions on use None known.

Details of manufacturer or importer

Manufacturer

Company name Koch Fertiliser Australia Pty Ltd

Address Level 4 492 St Kilda Rd
Melbourne 3004
Australia

Telephone +011.65.6831.6563 or
+1.316.828.7672

e-mail kochmsds@kochind.com

Emergency telephone number Chemtrec: +001 703-527-3887

(Please reverse charges)

2. Hazard(s) identification

Classification of the hazardous chemical

Physical hazards Not classified.

Health hazards Not classified.

Label elements, including precautionary statements

Hazard symbol(s) None.

Signal word None.

Hazard statement(s) The mixture does not meet the criteria for classification.

Precautionary statement(s)

Prevention Observe good industrial hygiene practices.

Response Wash hands after handling.

Storage Store away from incompatible materials.

Disposal Dispose of waste and residues in accordance with local authority requirements.

Supplemental information None.

Other hazards which do not result in classification None known.

3. Composition/information on ingredients

Mixture

Identity of chemical ingredients	CAS number and other unique identifiers	Concentration of ingredients
Urea	57-13-6	10 - 90
Diammonium phosphate	7783-28-0	0 - 90
Monoammonium phosphate	7722-76-1	0 - 90
Ammonium sulfate	7783-20-2	0 - 20

Sulphur	7704-34-9	< 10
Flutriafol	Proprietary	< 0.8

Composition comments All concentrations are in percent by weight. This Safety Data Sheet is not a guarantee of product specification or NPK value(s). NPK content is on specified sales orders, customer invoices, or product specification sheets obtained from supplier.

4. First-aid measures

Description of necessary first aid measures

Inhalation	Move to fresh air. Call a physician if symptoms develop or persist.
Skin contact	Wash off with soap and water. Get medical attention if irritation develops and persists.
Eye contact	Do not rub eyes. Rinse with water. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Personal protection for first-aid responders	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.
Symptoms caused by exposure	Dusts may irritate the respiratory tract, skin and eyes.
Medical attention and special treatment	Treat symptomatically.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for fire fighters	Selection of respiratory protection for firefighting: follow the general fire precautions indicated in the workplace. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	Firefighters should wear full protective clothing including self contained breathing apparatus. Use water spray to cool unopened containers.
Hazchem code	None.
General fire hazards	No unusual fire or explosion hazards noted.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up. For personal protection, see section 8 of the SDS.
For emergency responders	Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.
Methods and materials for containment and cleaning up	Avoid the generation of dusts during clean-up. Collect dust using a vacuum cleaner equipped with HEPA filter. This product is miscible in water. Stop the flow of material, if this is without risk. Large Spills: Wet down with water and dike for later disposal. Shovel the material into waste container. Following product recovery, flush area with water. Small Spills: Sweep up or vacuum up spillage and collect in suitable container for disposal. For waste disposal, see section 13 of the SDS.

7. Handling and storage

Precautions for safe handling	Minimise dust generation and accumulation. Provide appropriate exhaust ventilation at places where dust is formed. Practice good housekeeping.
Conditions for safe storage, including any incompatibilities	Store in tightly closed container. Store in a well-ventilated place. Store away from incompatible materials (see section 10 of the SDS).

8. Exposure controls and personal protection

Control parameters	Follow standard monitoring procedures.
Occupational exposure limits	No exposure limits noted for ingredient(s).
Biological limit values	No biological exposure limits noted for the ingredient(s).
Exposure guidelines	No exposure standards allocated.
Appropriate engineering controls	Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.
Individual protection measures, for example personal protective equipment (PPE)	
Eye/face protection	Wear safety glasses with side shields (or goggles).
Skin protection	
Hand protection	Wear appropriate chemical resistant gloves.
Other	Wear suitable protective clothing.
Respiratory protection	Wear respirator with dust filter.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
Hygiene measures	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance	
Physical state	Solid.
Form	Granular.
Colour	Light yellow to light blue.
Odour	Not available.
Odour threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapour pressure	Not available.
Vapour density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Soluble.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.

Other physical and chemical parameters

Explosive properties	Not explosive.
Oxidising properties	Not oxidising.

10. Stability and reactivity

Reactivity	Reacts violently with strong oxidants, nitrites, inorganic chlorides, chlorites and perchlorates causing fire and explosion hazard.
Chemical stability	Normally stable. May gradually give off ammonia. The product is hygroscopic and will absorb water by contact with the moisture in the air.
Possibility of hazardous reactions	Hazardous polymerisation does not occur.
Conditions to avoid	Moisture. Contact with incompatible materials. Extreme temperatures.
Incompatible materials	Acids. Strong oxidising agents. Strong reducing agents.
Hazardous decomposition products	During combustion: Ammonia. Biuret. Carbon oxides. Nitrogen oxides. Sulphur oxides.

11. Toxicological information

Information on possible routes of exposure

Inhalation	Dust may irritate respiratory system.
Skin contact	Dust or powder may irritate the skin.
Eye contact	Dust may irritate the eyes.
Ingestion	Expected to be a low ingestion hazard.

Symptoms related to exposure Dusts may irritate the respiratory tract, skin and eyes.

Acute toxicity

Components	Species	Test Results
Ammonium sulfate (CAS 7783-20-2)		
Acute		
Inhalation		
LC50	Rat	> 1000 mg/m ³ , 8 hours
Oral		
LD50	Rat	2840 mg/kg
Diammonium phosphate (CAS 7783-28-0)		
Acute		
Dermal		
LD50	Sprague-Dawley rat	> 5000 mg/kg
Inhalation		
LC50	Rat	> 5000 mg/m ³ , 4 hours
Oral		
LD50	Sprague-Dawley rat	> 2000 mg/kg
Monoammonium phosphate (CAS 7722-76-1)		
Acute		
Dermal		
LD50	Rat	> 5000 mg/kg
Inhalation		
LD50	Rat	> 5000 mg/m ³
Oral		
LD50	Rat	> 2000 mg/kg
Sulphur (CAS 7704-34-9)		
Acute		
Dermal		
LD50	Rat	> 2000 mg/kg, 24 hours

Components	Species	Test Results
Inhalation		
LC50	Rat	> 5.43 g/m ³ , 4 hours
Oral		
LD50	Rat	> 2000 mg/kg
Urea (CAS 57-13-6)		
Acute		
Oral		
LD50	Rat	14300 mg/kg
Skin corrosion/irritation	Prolonged skin contact may cause temporary irritation.	
Serious eye damage/irritation	Direct contact with eyes may cause temporary irritation.	
Respiratory or skin sensitisation		
Respiratory sensitisation	Not a respiratory sensitiser.	
Skin sensitisation	This product is not expected to cause skin sensitisation.	
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
Carcinogenicity	Not classifiable as to carcinogenicity to humans.	
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.	
Specific target organ toxicity - single exposure	Not classified.	
Specific target organ toxicity - repeated exposure	Not classified.	
Aspiration hazard	Not an aspiration hazard.	
Other information	This product has no known adverse effect on human health.	

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components	Species	Test Results
Ammonium sulfate (CAS 7783-20-2)		
Fish	LC50	Salmo gairdneri 173 mg/l, 96 hours
Aquatic		
Algae	EC50	Chlorella vulgaris 2700 mg/l, 18 days
Crustacea	EC50	Water flea (Daphnia magna) > 100 mg/l, 96 hours
Diammonium phosphate (CAS 7783-28-0)		
Aquatic		
Algae	EC50	Selenastrum capricornutum > 97.1 mg/l, 72 hours
Crustacea	LC50	Daphnia 1790 mg/l, 96 hours
Fish	LC50	Carp, hawk fish (Cirrhinus mrigala) 1700 mg/l, 96 hours
Sulphur (CAS 7704-34-9)		
Aquatic		
Crustacea	EC50	Daphnia magna > 5 µg/l, 48 hours
Fish	LC50	Oncorhynchus mykiss > 5 µg/l, 96 hours
Urea (CAS 57-13-6)		
Aquatic		
Algae	EC10	Algae 47 mg/l, 192 hours
Crustacea	LC50	Water flea (Daphnia magna) > 10000 mg/l, 24 hours
Fish	LC50	Leuciscus idus > 6810 mg/l, 96 hours
Persistence and degradability	No data is available on the degradability of any ingredients in the mixture.	
Bioaccumulative potential		

**Partition coefficient
n-octanol / water (log Kow)**
Urea (CAS 57-13-6) -2.11

Mobility in soil The product is soluble in water.

Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal methods Collect and reclaim or dispose in sealed containers at licensed waste disposal site.

Residual waste Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

ADG

Not regulated as dangerous goods.

RID

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

**Transport in bulk according to
Annex II of MARPOL 73/78 and
the IBC Code** Not applicable.

15. Regulatory information

Safety, health and environmental regulations

National regulations No poison schedule number allocated. This Safety Data Sheet was prepared in accordance with Australia Model Code of Practice for the preparation of Safety Data Sheets for Hazardous Chemicals.

Australia Medicines & Poisons Appendix A

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix B

Diammonium phosphate (CAS 7783-28-0)
Urea (CAS 57-13-6)

Australia Medicines & Poisons Appendix D

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix E

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix F

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix G

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix H

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix I

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix J

Poisons schedule number not allocated.

Australia Medicines & Poisons Appendix K

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 10

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 2

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 3

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 4

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 5

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 6

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 7

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 8

Poisons schedule number not allocated.

Australia Medicines & Poisons Schedule 9

Poisons schedule number not allocated.

High Volume Industrial Chemicals (HVIC)

Ammonium sulfate (CAS 7783-20-2)

1000 - 9999 TONNES See the regulation for additional information.

Monoammonium phosphate (CAS 7722-76-1)

1000 - 9999 TONNES See the regulation for additional information.

Sulphur (CAS 7704-34-9)

10000 - 99999 TONNES See the regulation for additional information.

Urea (CAS 57-13-6)

100000 - 999999 TONNES See the regulation for additional information.

Importation of Ozone Depleting Substances (Customs(Prohibited imports) Regulations 1956, Schedule 10)

Not listed.

National Pollutant Inventory (NPI) substance reporting list

Not listed.

Prohibited Carcinogenic Substances

Not regulated.

Prohibited Substances (National Model Regulation for the control of Workplace Hazardous Substances, Schedule 2 NOHSC:1005 (1994) as amended)

Not listed.

Restricted Importation of Organochlorine Chemicals (Customs(Prohibited Imports) Regulations 1956, Schedule 9)

Not listed.

Restricted Carcinogenic Substances

Not regulated.

International regulations**Stockholm Convention**

Not applicable.

Rotterdam Convention

Not applicable.

Kyoto Protocol

Not applicable.

Montreal Protocol

Not applicable.

Basel Convention

Not applicable.

International Inventories**Country(s) or region****Inventory name****On inventory (yes/no)***

Australia

Australian Inventory of Chemical Substances (AICS)

Yes

Canada

Domestic Substances List (DSL)

Yes

Canada

Non-Domestic Substances List (NDSL)

No

China

Inventory of Existing Chemical Substances in China (IECSC)

Yes

Europe

European Inventory of Existing Commercial Chemical Substances (EINECS)

Yes

Country(s) or region	Inventory name	On inventory (yes/no)*
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information

Issue date 26-May-2020

Revision date -

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