KOCH.

SAFETY DATA SHEET

KOCH FERTILISER AUSTRALIA PTY LTD

1. Identification

Product identifier Ammonium Phosphate + Urea Blend

Other means of identification

Monoammonium Phosphate(MAP) + Urea * Diammonium Phosphate (DAP) + Urea * GAIN+z™ + **Synonyms**

Urea * GAIN+zs™ + Urea * GAIN+s™ + Urea

Recommended use of the chemical and restrictions on use

Recommended use Fertiliser. Restrictions on use Not available.

Details of manufacturer or importer

Manufacturer

Company name Koch Fertiliser Australia Pty Ltd

Address Level 4 492 St Kilda Rd

Melbourne 3004

Australia

+011.65.6831.6563 or **Telephone**

+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. Not classified. **Health hazards**

Label elements, including precautionary statements

Hazard symbol(s) None. Signal word None.

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

Precautionary statement(s)

Prevention Observe good industrial hygiene practices.

Wash hands after handling. Response

Storage Store away from incompatible materials.

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

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	10 - 90
Monoammonium phosphate	7722-76-1	10 - 90

Ammonium Phosphate + Urea Blend SDS Australia **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

Ensure that medical personnel are aware of the material(s) involved, and take precautions to

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.

Rinse mouth. Get medical attention if symptoms occur. Ingestion

Personal protection for first-aid

responders

protect themselves.

Symptoms caused by exposure

Medical attention and special

treatment

Dusts may irritate the respiratory tract, skin and eyes. Treat symptomatically.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing

media

Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing

media

None known.

Specific hazards arising from

the chemical

Urea is non-combustible under most conditions. However, during a fire, irritating/toxic gases may be generated. The dust can be ignited at very high temperatures, but not expected to explode (minimum ignition temperature (cloud) = 900 deg C).

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 Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk.

Hazchem code

This product is not flammable. Will burn if involved in a fire. General fire hazards

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

Methods and materials for

containment and cleaning up

Avoid discharge into drains, water courses or onto the ground.

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 Occupational exposure limits Follow standard monitoring procedures. No exposure limits noted for ingredient(s).

Biological limit values

No biological exposure limits noted for the ingredient(s).

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Exposure guidelines No exposure standards allocated.

Appropriate engineering If material is ground, cut, or used in any operation which may generate dusts, use appropriate local

exhaust ventilation to keep exposures below the recommended exposure limits. controls

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.

Wear suitable protective clothing. Other Respiratory protection Wear respirator with dust filter.

Wear appropriate thermal protective clothing, when necessary. Thermal hazards

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

Solid. **Physical state** Granules. **Form** Colour White to brown Not available. Odour **Odour threshold** Not available. Not available. рH Melting point/freezing point Not available. Initial boiling point and boiling Not available.

range

Not available. Flash point **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.

Not available. Explosive limit - lower (%) Not available. Explosive limit - upper

(%)

Not available. Vapour density Not available. Relative density

Solubility(ies)

Solubility (water) Soluble. **Partition coefficient** Not available.

(n-octanol/water)

Not available. **Auto-ignition temperature** Not available. **Decomposition temperature** Not available. **Viscosity**

Other physical and chemical parameters

Not explosive. **Explosive properties 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.

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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 Extreme temperatures. Moisture.

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

InhalationDust may irritate respiratory system.Skin contactDust 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

Diammonium phosphate (CAS 7783-28-0)

<u>Acute</u>

Dermal

LD50 Sprague-Dawley rat > 5000 mg/kg

Inhalation

LC50 Rat > 5000 mg/m³, 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/m³

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 mutagenicityNo 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.

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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
Diammonium phosphate (CAS 7	783-28-0)		
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
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.

Dispose of in accordance with local regulations. Empty containers or liners may retain some Residual waste

product residues. This material and its container must be disposed of in a safe manner (see:

Disposal instructions).

Since emptied containers may retain product residue, follow label warnings even after container is Contaminated packaging

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

Not applicable.

the IBC Code

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)

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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)

Monoammonium phosphate (CAS 7722-76-1)

Urea (CAS 57-13-6)

1000 - 9999 TONNES See the regulation for additional information.

100000 - $999999\ \mbox{TONNES}$ See the regulation for additional information.

Importation of Ozone Deleting 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

Resricted 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.

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Kyoto Protocol

Not applicable.

Montreal Protocol

Not applicable.

Basel Convention

Not applicable.

International Inventories

Australia

Country(s) or region

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
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

Australian Inventory of Chemical Substances (AICS)

Taiwan Chemical Substance Inventory (TCSI)

Toxic Substances Control Act (TSCA) Inventory

Inventory name

16. Other information

Issue date 10-April-2020

Revision date

United States & Puerto Rico

Disclaimer

Taiwan

NOTICE: The information contained in this document is based on data considered to be accurate as of the preparation date of this Safety Data Sheet (SDS) and was prepared pursuant to applicable Government regulation(s). This SDS may not be used as a commercial specification sheet of manufacturer or seller, and no warranty or representation, expressed or implied, is made as to the accuracy or comprehensiveness of the above data and safety information, nor is any authorization given or implied to practice any patented invention without a license. Additional information may be needed to evaluate other uses of the product, including use of the product in combination with any materials or in any processes other than those specifically referenced. Information provided about any hazards that may be associated with the product is not meant to suggest that use of the product in a given application will necessarily result in any exposure or risk to workers or the general public. Purchasers and users of the product are responsible for determining that this product is suitable for the intended use and application. No responsibility can be assumed by vendor for any damage or injury resulting from failure to adhere to recommended uses, or from any hazards inherent to the product. Purchasers and users assume all risk of use, storage and handling of the product in compliance with applicable federal, state and local laws and regulations. Purchasers and users of the product should explicitly advise their employees, agents, contractors and customers who will use the product of this SDS.

Ammonium Phosphate + Urea Blend

On inventory (yes/no)*

Yes

Yes

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^{*}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).