Section 1 - Identification of Material and Supplier

Chemical Nature: Urea Fertiliser
Trade Name: **Black Urea**
Product Use: Fertiliser
Supplier: **Amgrow Pty Ltd,**
Unit B2a, 3-29 Birnie Avenue,
Lidcombe NSW 2141
Phone: (02) 9395 1200 (Office hours), Fax: (02) 9395 1241
www.amgrow.com.au
Creation Date: **August 2023** (valid for 5 years from this date)

Section 2 - Hazards Identification

NOT CLASSIFIED AS HAZARDOUS ACCORDING TO THE CRITERIA OF SWA

NOT A DANGEROUS GOOD ACCORDING TO THE ADG CODE, IATA OR IMDG/IMSBC CRITERIA

Hazard Statements: Not Hazardous - No criteria found.

Precautionary Statements Do not breathe dusts. Wear suitable clothing. Avoid contact with skin & eyes

SUSMP Classification: None allocated.

ADG Classification: None allocated. Not a Dangerous Good according to Australian Dangerous Goods (ADG) Code, IATA or IMDG/IMSBC criteria.

UN Number: None allocated

GHS Signal word: NONE. Not hazardous.

PREVENTION

P102: Keep out of reach of children.
P262: Do not get in eyes, on skin, or on clothing.
P281: Use personal protective equipment as required.

RESPONSE

P353: Rinse skin or shower with water.
P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P370+P378: Not combustible. Use extinguishing media suited to burning materials.

STORAGE

P402+P404: Store in a dry place. Store in a closed container.

DISPOSAL

P501: Dispose of small quantities and empty containers by wrapping with paper and putting in garbage. For larger quantities, if recycling or reclaiming is not possible, use a commercial waste disposal service.

Emergency Overview

Physical Description & colour: Dark brown granular solid
Odour: No appreciable odour
Major Health Hazards: No significant risk factors have been found for this product in normal use.

Section 3 - Composition/Information on Ingredients

Ingredients	*CAS No*
Urea	57-13-6
Carbon	7440-44-0

This is a commercial product whose exact ratio of components may vary slightly. Minor quantities of other non hazardous ingredients are also possible.

Section 4 - First Aid Measures

General Information: You should call The Poisons Information Centre if you feel that you may have been poisoned, burned or irritated by this product. The number is 13 1126 from anywhere in Australia (0800 764 766 in New Zealand) and is available at all times. Have this SDS with you when you call.
Inhalation: No first aid measures normally required. However, if inhalation has occurred, and irritation has developed, remove to fresh air and observe until recovered. If irritation becomes painful or persists more than about 30 minutes, seek medical advice.
Skin Contact: Gently brush away excess particles. Wash gently and thoroughly with water (use non-abrasive soap if necessary) for 5 minutes or until chemical is removed.
Eye Contact: If in eyes, hold eyelids apart and flush continuously with running water. Continue flushing until advised to stop by a Poisons Information Centre, a doctor, or for at least 15 minutes. Obtain medical advice if irritation becomes painful or lasts more than a few minutes.
Ingestion: If product is swallowed or gets in mouth, do NOT induce vomiting; wash mouth with water and give some water to drink. If symptoms develop, or if in doubt contact a Poisons Information Centre or doctor.
Immediate medical attention and special treatment needed: Treat symptomatically

Section 5 - Fire Fighting Measures

Fire and Explosion Hazards: There is no risk of an explosion from this product under normal circumstances if it is involved in a fire.
Special hazards arising from the substance or mixture: Non flammable. May evolve toxic gases (carbon/ nitrogen oxides, ammonia, hydrocarbons) when heated to decomposition.
Extinguishing Media: Not combustible. Use extinguishing media suited to burning materials. If a significant quantity of this product is involved in a fire, call the fire brigade.
Advice for fire-fighters: Evacuate area and contact emergency services. Toxic gases may be evolved in a fire situation. Remain upwind and notify those downwind of hazard. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire. Use water fog to cool intact containers and nearby storage areas.

Flash point:	Does not burn.
Upper Flammability Limit:	Does not burn.
Lower Flammability Limit:	Does not burn.
Auto ignition temperature:	Not applicable - does not burn.
Flammability Class:	Does not burn.

Section 6 - Accidental Release Measures

Accidental release: For minor spills, contain spillage, then collect and place in suitable containers for disposal. Avoid generating dust and put empty container in garbage. Although no special protective clothing is normally necessary because of occasional minor contact with this product, it is good practice to wear impermeable gloves when handling chemical products. In the event of a major spill, prevent spillage from entering drains or water courses and call emergency services. This material may be suitable for approved landfill.

Section 7 - Handling and Storage

Handling: Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas.
Storage: Store in cool, dry area removed from foodstuffs. Ensure containers are labelled, protected from physical damage and sealed when not in use. Do not allow to come into contact with water either from rain, condensation or the surface on which it is stored. Bagged fertilisers should be stored under cover and out of direct sunlight. Store away from farm chemicals eg insecticides, fungicides and herbicides. This product when stored in a confined, unventilated space can give off ammonia or other odour and lead to the depletion of oxygen within this space and other confined areas

Section 8 - Exposure Controls and Personal Protection

Exposure Limits	TWA (mg/mP3P)	STEL (mg/mP3P)	ADI (mg/Kg/day)	NOEL (mg/Kg/day

Exposure limits have not been set by SWA for other ingredients in product. The TWA exposure value is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. There is a blanket limit of 10mg/m^3 for dusts or mists when limits have not otherwise been established. The STEL (Short Term Exposure Limit) is an exposure value that should not be exceeded for more than 15 minutes and should not be repeated for more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The term "peak "is used when the TWA limit, because of the rapid action of the substance, should never be exceeded, even briefly. ADI means Acceptable Daily Intake and NOEL means No-observable-effect-level. Values taken from Australian ADI List, 31st March 2012

Personal Protection

The following Australian Standards will provide general advice regarding safety clothing and equipment: Respiratory equipment: **AS/NZS 1715**, Protective Gloves: **AS 2161**, Industrial Clothing: **AS2919**, Industrial Eye Protection: **AS1336** and **AS/NZS 1337**, Occupational Protective Footwear: **AS/NZS2210**.

No special equipment is usually needed when occasionally handling small quantities. The following instructions are for bulk handling or where regular exposure in an occupational setting occurs without proper containment systems.

Ventilation: Avoid high dust concentration and provide local exhaust ventilation where necessary.

Eye Protection: Eye protection such as protective glasses or goggles is recommended.

Skin Protection: Wear gloves or gauntlets and long sleeves when using this product to protect against skin irritation

Respirator: Use P2 type canister respirator where high concentrations of airborne dust is present

Provision of eye wash facilities and safety shower recommended.

Wash hands before eating, drinking, smoking or going to toilet, launder protective clothing before re-use.

Section 9 - Physical and Chemical Properties:

Physical Description & Colour:	Dark Brown Granular Solid
Odour:	Odourless.
Flammability:	Non Flammable
Flash Point:	Not Relevant
Boiling Point:	Not Relevant
Melting Point:	133°C
Evaporation Rate:	Not Relevant
Ph:	9.1 (10% Solution)
Vapour Density:	Not Relevant
Specific Gravity:	1.33
Solubility (Water):	1050 G/L @ 20°C
Vapour Pressure:	Not Relevant
Upper Explosion Limit:	Not Relevant
Lower Explosion Limit:	Not Relevant
Partition Coefficient:	Not Available
Auto ignition Temperature:	> 133°C
Decomposition Temperature:	Not Available
Viscosity:	Not Relevant
Explosive Properties:	Not Relevant
Oxidising Properties:	Not Available
Odour Threshold:	Not Available
Bulk Density:	700 - 780 Kg/M^3

Section 10 - Stability and Reactivity

Reactivity: This product is unlikely to react or decompose under normal storage conditions.

Conditions to Avoid: Heat, flames.

Incompatibilities: no special incompatibilities

Fire Decomposition Products: May evolve toxic gases (ammonia, carbon/ nitrogen oxides, hydrocarbons) when heated to decomposition.

Polymerisation: This product is unlikely to undergo polymerisation processes.

Section 11 - Toxicological Information

Target Organs: There is no data to hand indicating any particular target organs.

Potential Health Effects

Low toxicity. Under normal conditions of use, adverse health effects are not anticipated. This product is generally considered to be of low toxicity. Use safe work practices to avoid eye contact, prolonged skin contact and dust generation - inhalation.

FARM USE: Urea can be toxic to livestock, pets and wildlife. As little as 0.25 g/kg live weight can kill cattle not previously adapted to it. Avoid accidental ingestion and contamination of drinking water. Clean up spills promptly. Should livestock poisoning occur, vinegar (acetic acid) needs to be administered at quite high dose rates (as a guide, 2 to 4 litres for cattle), repeating the treatment if necessary. The vinegar makes the ruminal contents more acidic and delays the uptake of ammonia by the blood. Death from urea poisoning is rapid (generally within 2 hours of ingestion of the urea) and often by the time the symptoms appear (severe abdominal pain, shivering, excessive salivation, rapid breathing, unstable gait, bellowing and bloat), it is too late. To have any chance of being effective, treatment must be quick.

Eye: Irritant. Contact may result in irritation, lacrimation, pain and redness.
Inhalation: Low irritant. Over exposure may result in irritation of the nose and throat, with coughing.
Skin Irritant: Contact may result in irritation, redness, pain and rash.
Ingestion: Low toxicity. Ingestion may result in gastrointestinal irritation, nausea and vomiting. Ingestion of large quantities may result in dizziness, drowsiness, excessive urine, weakness and confusion
Toxicity data UREA (57-13-6)
LD_{50} (ingestion) 8471 mg/kg (rat)
LD_{50} (intraperitoneal) > 5000 mg/kg (rat)
LD_{50} (intravenous) 4600 mg/kg (mouse)
LD_{50} (subcutaneous) 8200 mg/kg (rat)
LDLo (intraperitoneal) 6608 mg/kg (mouse)
LDLo (intravenous) 4800 mg/kg (rabbit)
LDLo (subcutaneous) 3000 mg/kg (rabbit)
Carcinogen Status:
SWA: No significant ingredient is classified as carcinogenic by SWA.
NTP: No significant ingredient is classified as carcinogenic by NTP.
IARC: No significant ingredient is classified as carcinogenic by IARC.

Classification of Hazardous Ingredients

Section 12 - Ecological Information

Avoid spills and contamination of waterways. Nitrogen fertilisers contain or form ammonium and nitrate. Nitrate is susceptible to leaching and may contaminate groundwater. High nitrate concentrations may render water unsuitable for human and livestock consumption. Depending on the concentration and species, ammonium may be toxic to fish. Elevated nitrogen concentrations in static surface waters can stimulate weed and algal growth. Algae affect water quality and taste

Section 13 - Disposal Considerations

Disposal: Dispose of small quantities and empty containers by wrapping with paper and putting in garbage. For larger quantities, if recycling or reclaiming is not possible, use a commercial waste disposal service. This product can usually be used for its intended purpose unless contaminated by substances that make it unsuited.

Section 14 - Transport Information

UN Number: This product is not classified as a Dangerous Good by ADG, IATA or IMDG/IMSBC criteria. No special transport conditions are necessary unless required by other regulations.

Section 15 - Regulatory Information

AICIS: All of the significant ingredients in this formulation are compliant with AICIS regulations.

Section 16 - Other Information

This SDS contains only safety-related information. For other data see product literature.

Acronyms:

ADG Code	Australian Code for the Transport of Dangerous Goods by Road and Rail	**IMSBC**	International Maritime Solid Bulk Code
AICS	Australian Inventory of Industrial Chemicals	**NOHSC**	National Occupational Health and Safety Commission
ASCC	Australian Safety & Compensation Council	**NTP**	National Toxicology Program (USA)
CAS number	Chemical Abstracts Service Registry Number	**R-Phrase**	Risk Phrase
Hazchem Number	Emergency action code of numbers and letters that provide information to emergency services especially fire-fighters	**SUSMP**	Standard for the Uniform Scheduling of Medicines & Poisons
IARC	International Agency for Research on Cancer	**SWA**	Safe Work Australia (formerly ASCC and NOHSC)
IATA	International Air Transport Authority	**UN Number**	United Nations Number
IMDG	International Maritime Dangerous Good		

THIS SDS SUMMARISES OUR BEST KNOWLEDGE OF THE HEALTH AND SAFETY HAZARD INFORMATION OF THE PRODUCT AND HOW TO SAFELY HANDLE AND USE THE PRODUCT IN THE WORKPLACE. EACH USER MUST REVIEW THIS SDS 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 RISK ASSESSMENT CAN BE MADE, THE USER SHOULD CONTACT THIS COMPANY SO WE CAN ATTEMPT TO OBTAIN ADDITIONAL INFORMATION FROM OUR SUPPLIERS 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 ON REQUEST.

Please read all labels carefully before using product.

This SDS is prepared in accord with the SWA document “Preparation of Safety Data Sheets for Hazardous Chemicals - Code of Practice” (July 2020)

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