Safety Data Sheet

1. IDENTIFICATION OF THE MATERIAL AND MANUFACTURER

Product Name: **BLACK UREA®**

Intended Use: Nitrogen Fertiliser.

Details of Supplier: Advanced Nutrients Pty Ltd
13 Hinkler Court
Brendale. QLD. 4500
Ph: 07 3448 0051
Email: service@advancednutrients.com.au

Emergency Contact: **+61 427 908 329**

2. HAZARDS IDENTIFICATION

Classification: **NOT CLASSIFIED AS HAZARDOUS ACCORDING TO THE CRITERIA OF SAFE WORK AUSTRALIA**

GHS Label: No signal word, pictograms, hazard or precautionary statements have been allocated.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance Name: UREA CAS# 57-13-6 EC# 200-315-5 Content: 98-99%
Proprietary ingredients not considered hazardous: balance to 100%

4. FIRST AID MEASURES

HEALTH EFFECTS

SWALLOWED:	Ingestion may cause diarrhea, nausea, vomiting and cramps. Irritation to mouth and throat.
EYE:	Irritant to eyes.
SKIN:	Mildly irritating to skin.
INHALED:	Irritation to the respiratory tract. Symptoms may include coughing, shortness of breath.

FIRST AID

SWALLOWED:	If Symptoms occur seek medical attention or contact the Poisons Information Centre on 13 11 26. Do NOT induce vomiting.
EYE:	Flush gently with running water for 15 minutes
SKIN:	Remove contaminated clothing, wash with soap and water. Seek medical attention if irritation occurs
INHALED:	If inhaled, remove from contaminated area. If irritation persists, seek medical attention.

5. FIRE FIGHTING MEASURES

FLAMMABILITY:	Non flammable. May evolve toxic gases when heated to decomposition.
EXTINGUISHING MEDIA:	Use extinguishing media suitable for surrounding fire.

FIRE / EXPLOSION HAZARD:	Evacuate area and contact emergency services. Toxic Gases (carbon oxides, nitrogen oxides, ammonia, hydrocarbons) may be evolved in a fire situation. Remain upwind and notify those downwind of hazard. Wear full protective equipment including self contained breathing apparatus when combating fire. Use water fog to cool intact containers and nearby storage areas.
HAZCHEM Code:	None allocated

6. ACCIDENTAL RELEASE MEASURES

SPILLS AND DISPOSAL:	If spilt, use personal protective equipment (dust proof goggles, PVC/rubber gloves and a class 1 respirator). Ventilate area where possible. Contain spillage then collect and place in suitable containers for disposal. Avoid generating dust. If outdoors, and not immediately recoverable, protect spill from the elements to contain wind and water dispersion. Recovered product may be applied to agricultural lands in line with Agronomist advice.

7. HANDLING AND STORAGE

VENTILATION:	Ensure ventilation is adequate to maintain air concentrations below exposure standards and as low as is reasonably practicable. While good natural ventilation may be adequate in most cases, local exhaust ventilation may be required.
PERSONAL PROTECTION:	Protective equipment must be worn: PVC gloves, waterproof apron, safety boots and a full-face shield. Avoid breathing dust or vapours.
FLAMMABILITY:	The product poses no flammability hazard.
STORAGE AND TRANSPORT:	Store in cool dry place. Not recommended for storage in silos. Ensure containers are labeled adequately and are protected from physical damage and in a well-ventilated area. When stored in a confined unventilated space, this product can give off ammonia or odour and lead to the depletion of oxygen within this space and other confined spaces. Do not allow to come into contact with water, regardless of rain, condensation or surface water. Bagged product, these bags should be stored uncover and out of direct sunlight. 1000kg bags should not be stacked more than two high as pressure promotes caking. Store away from Agro-Chemicals, animal feeds and foodstuffs. Store above 4°C, freezing may reduce the effectiveness of the product.
OTHER INFORMATION:	Avoid contact with inter halogens, strong acids, strong oxidising agents (may decompose) and metals (is corrosive to most). ***KEEP OUT OF REACH OF CHILDREN***

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

VENTILATION:	Ensure ventilation is adequate to maintain air concentrations below exposure standards and as low as is reasonably practicable. While good natural ventilation may be adequate in most cases, local exhaust ventilation may be required.
PERSONAL PROTECTION:	Protective equipment must be worn: PVC gloves, safety boots and safety glasses. Sensitive skin must be kept covered. Avoid breathing dust or vapours. Masks must be properly fitted and comply with Australian Standards AS/NZS 1715;1716 "Selection, use and maintenance of respiratory protective devices."

9. PHYSICAL AND CHEMICAL PROPERTIES

PRODUCT DESCRIPTION / PROPERTIES

APPEARANCE:	Dark Brown Granules
MELTING POINT:	133°C
SOLUBILITY (WATER):	1050 g/L @ 20°C
EXPOSURE STANDARD:	10mg/m3 Nuisance dust
SPECIFIC GRAVITY:	1.33
BULK DENSITY:	700-780 kg/m3
FLASH POINT:	No information available
FLAMMABILITY LIMITS:	No information available
AUTOIGNITION TEMPERATURE:	>133°C
pH (NEAT):	9.1 (10% Solution)
ODOUR:	Odourless

10. STABILITY AND REACTIVITY

REACTIVITY:	No known reaction to occur
STABILITY:	Stable under recommended storage conditions
CONDITIONS TO AVOID:	Caustics and strong acids will affect the quality and condition of the product. Avoid heat, and other ignition sources.
INCOMPATIBLE MATERIALS:	No information available
HAZARDOUS DECOMPOSITION:	May evolve toxic gases when heated to decomposition

11. TOXICOLOGICAL INFORMATION

This product is generally considered to be of low toxicity. Use safe work practices. 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. Should livestock poisoning occur, vinegar (acetic acid) needs to be administered at quite high dose rates (as a guide, 2-4 litres for cattle) repeat if necessary. Treatment must be quick, as death from urea poisoning occurs within 2 hours of ingestion. If symptoms such as shivering, excessive salivation, rapid breathing, unstable gait, bellowing and bloating occur with cattle, it is too late to treat.

Substance Name:	UREA	Oral LD50: >5000 mg/kg Rat	DERMAL: >5000 mg/kg Rat

Skin	May cause redness, irritation and rash
Eye	May cause redness, irritation and pain
Sensitisation	Not classified as causing sensitisation
Mutagenicity	Not classified as a mutagen
Carcinogenicity	Not classified as a carcinogen
Reproduction	Not classified as a toxin
STOT–acute exposure	Over exposure may cause irritation of the respiratory system
STOT–chronic exposure	Not classified as causing organ damage
Aspiration	Not classified as causing aspiration

12. ECOLOGICAL INFORMATION

TOXICITY	Low acute ecotoxicity
PERSISTENCE	readily biodegradable
BIOACCUMULATIVE	unlikely
MOBILITY	Urea is transformed to ammonium and then nitrate in soils. Ammonium is more stable in soil with adequate exchange capacity, though may revert to ammonia in some conditions and lost to atmosphere. Nitrate is highly soluble therefore highly mobile, and is prone to leaching and denitrification.
ADVERSE EFFECTS	Avoid contaminating waterways. Fertilisers, particularly those containing nitrogen and/or phosphorus, can stimulate weed and algal growth in static surface waters. Nitrogen fertilisers may contain or form nitrate which can contaminate surface or ground water. High nitrate concentrations may render the water unsuitable for human consumption and livestock consumption.

13. DISPOSAL CONSIDERATIONS

DISPOSAL:	Beneficial reuse is the most preferred option of disposal. Degraded or non-harmful contaminated fertilisers, can be applied in diverse forms and methods (spreading or liquid application). Fertilizers contaminated with harmful substances (chemicals, hydrocarbons, etc.) must be disposed in accordance with advice from the relevant Waste Management Authority.

ALWAYS DISPOSE OF IN ACCORDANCE WITH LOCAL, STATE AND FEDERAL REGULATIONS

14. TRANSPORT INFORMATION

TRANSPORT: This is a non-dangerous good by the criteria of the ADG, IMDG, and IATA

UN NUMBER:	N/A
PROPER SHIPPING NAME:	N/A
D.G. CLASS:	N/A
PACKAGING GROUP:	N/A
SUBSIDIARY RISK:	NONE

HAZCHEM CODE: N/A
POISONS SCHEDULE: N/A

15. REGULATORY INFORMATION

Classifications: Safe Work Australia criteria is based on the Globally Harmonised System (GHS) of Classification and Labelling of Chemicals (GHS Revision 7).

Inventory Listings: AUSTRALIA: AIIC (Australian Inventory of Industrial Chemicals). All components are listed on AIIC, or are exempt.

16. OTHER INFORMATION

SDS Creation Date: 18/09/2024 **Issue Number: 007**
Customer Service: 1800 244 009 (This Issue Number replaces all previous issues)
Australian Poisons Info Centre: 13 11 26

Abbreviations

ADG Australian Dangerous Goods Code
CAS # Chemical Abstract Service number - used to uniquely identify chemical compounds
EC No. European Community Number
GHS Globally Harmonized System
IATA International Air Transport Association
IMDG International Maritime Dangerous Goods Code
LC50 Lethal Concentration, 50% / Median Lethal Concentration
LD50 Lethal Dose, 50% / Median Lethal Dose
OEL Occupational Exposure Limit
pH relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).
ppm Parts Per Million
STEL Short-Term Exposure Limit
STOT-RE Specific target organ toxicity (repeated exposure)
STOT-SE Specific target organ toxicity (single exposure)
SWA Safe Work Australia

The product should not be used for purposes other than shown in Section 1 without first referring to the supplier and obtaining written instructions. As specific conditions of use of the product are outside of the suppliers' control, the user is responsible for ensuring that the requirements of the relevant legislation are complied with. The information in this Safety Data Sheet is base on the present knowledge and current national legislation. It provides guidance on health, safety and environmental aspects of the product and should not be construed as a guarantee of technical performance or suitability for particular applications. This SDS will be revised and updated as requirements occur. Should further information and relevant advice be required, contact Advanced Nutrients Pty Ltd.