




SAFETY DATA SHEET

Product	Personal Protection Elements		
UREA	 Gloves	 Respiratory protection	 Safety goggles

SECTION 1. PRODUCT IDENTIFICATION	
GHS Product identifier	Grainy Urea
Other means of identification	Does not have
Recommended use of the chemical and restrictions on use In the agricultural industry as a fertilizer.	EMERGENCY PHONE NUMBER 24 HS (0291) 459-8188 - (0291) 459-8008 – Security (0291) 154-050419 – Safety Health (0291) 459-8196 – Medical Service
SUPPLIER Profertil S.A. Planta de Fertilizantes, Puerto de Ing. White – Zona Cangrejales, Bahía Blanca, Argentina	DISTRIBUTOR Profertil S.A. Planta de Fertilizantes, Puerto de Ing. White – Zona Cangrejales, Bahía Blanca, Argentina

SECTION 2. HAZARD IDENTIFICATION							
Classification of the substance	Classification		Labeled				Hazard Indication Code
	Hazard class	Hazard category	Pictogram		Signal word	Hazard Indication	
			GHS	Model Regulations of the United Nations			
	Not classified	Not applicable					
Summary	Not classified as hazardous matter in accordance with Directive 92/32 / EEC. The product is not considered toxic to humans. It is not carcinogenic, mutagenic or teratogenic according to ACGIH, EPA, IARC, OSHA. Its decomposition can affect aquatic life. Contact with dust from this product may cause irritation to the eyes, respiratory tract and skin.						

SECTION 3. INFORMATION ON INGREDIENTS					
Composition: 46% N ₂		Comercialization: Granulated in bag and in bulk.			
Common name	Synonyms of the Substance	CAS number	Chemical Family	Formula	Composition (% by weight)
Urea	Urea Granulated Fertilizer	57-13-6	Carbamide - Aliphatic Amide	CO(NH ₂) ₂	>98
Urea, reaction products with Formaldehyde	UF	68611-64-3	-	-	<1
Biuret	-	108-19-0	-	NH(CONH ₂) ₂	<1,5



SECTION 4. FIRST-AID MEASURES	
Contact with eyes	Contact with dust may cause irritation to the eyes, so immediately rinse the eyes with plenty of water, for at least 15 minutes, keeping the eyelids open. Request medical attention.
Contact with skin	Contact with dust may cause skin irritation, so wash the contaminated area with soap and water. If irritation persists seek medical attention. Remove and wash contaminated clothing and shoes.
Inhalation	Contact with dust can cause irritation to the mucous membranes and upper respiratory tract, so the exposed person must be moved to a place where he can breathe uncontaminated air. Request medical attention.
Ingestion	Rinse mouth with water. Do not induce vomiting unless directed by medical personnel.
SECTION 5. FIRE-FIGHTING MEASURES	
Suitable extinguishing media	Fire extinguishing agent A/B/C.
Specific hazards arising from the chemical	It is not combustible. Its thermal decomposition can produce ammonia (NH ₃), nitrogen oxides (NO _x), carbon oxides (CO, CO ₂) and water.
Special protective actions for fire-fighters	In case of fumes or gases, those responsible for controlling the fire should use Autonomous Breathing Equipment and Structural Equipment for Firefighters. Collect the water used in fire fighting for later reuse or treatment.
SECTION 6. ACCIDENTAL RELEASE MEASURES	
Personal precautions, protective equipment and emergency procedures	Use the corresponding PPEs. In case of dust generation, ventilation should be provided that allows compliance with occupational exposure limits. Otherwise, the use of a mask should be indicated.
Environmental precautions	Prevent spills from entering drains, surface water courses, groundwater, etc. Avoid the generation of dust.
Methods and materials for containment and cleaning up	Absorb and/or contain the spill with inert material and place in a suitable container. Spilled material can be slippery. If the product is contaminated with soil it can be reused as fertilizer. To do this, you must collect the spilled material with mechanical means (manual and/or mechanical shovels, industrial vacuum cleaners, etc.). Do not use water. In case of precipitation, avoid entering water bodies and cover the product with impermeable material until the end of said meteorological condition. Water with recovered urea can be reused as fertilizer.
SECTION 7. HANDLING AND STORAGE	
Precautions for safe handling	Avoid the generation of dust, smoke or fog. Avoid spills into water. Use adequate ventilation to maintain exposure within the allowed limits. Prevent handling with incompatible substances. Do not eat, drink or smoke in work areas. Wash your hands after handling the products. Take off contaminated clothing and PPE before entering the dining rooms.
Conditions for safe storage	Store in dry, temperate and adequately ventilated areas (if necessary using appropriate technical controls), to keep particulate material concentrations below the exposure limits. Avoid contact with incompatible substances.

SECTION 8. EXPOSURE CONTROL/PERSONAL PROTECTION			
Control parameters	There are no specific occupational exposure limits. ACGIH TLV-TWA / Res. MTEySS N° 295/03: (insoluble) not-otherwise specified particles (PNEOF) 10 mg/m ³ in 8 hours for inhalable particles and 3 mg/m ³ in 8 hours for breathable particles. OSHA PEL: Total powder: 15 mg/m ³ TWA (8 hours), breathable fraction: 5 mg/m ³ TWA (8 hours).		
Appropriate engineering controls	Maintain airborne dust concentrations below occupational exposure limits. If necessary, local ventilation by aspiration should be used.		
Individual protection measures, personal protective equipment (PPEs)	To avoid contact with skin or eyes, wear long-sleeved clothing that protects the limbs and/or body suit, leather gloves and safety goggles. In case of presence of high dispersions and concentrations of dust, use waterproof romper, PVC gloves and approved respiratory protection for powders.		
SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES			
Appearance		Physical state: Solid (Grainy) Colour: White	
Odour	Slightly ammoniacal	Vapour pressure	0.002 Pa @ 25 °C
Odour threshold	Not available	Vapour density	Not applicable
pH (10% sol. in water)	8	Solubility	624 g/L @ 20 °C 40% at 0 °C, 88% at 100 °C (in water)
Melting point / freezing point	132,7 °C	Partition coefficient: n-octanol/water	Insoluble in octanol
Initial boiling point and boiling range	Not available	Auto-ignition temperatura	Not available
Flash point	Not available	Decomposition temperatura	190 °C
Evaporation rate	Not applicable	Relative density	1.33 @ 20 °C
Flammability	No inflamable	Apparent density	Bulk: approximately 720 kg/m ³ Bagged: approximately 810 kg/m ³
Upper/lower flammability or explosive limits	Not available	Viscosity	Not available
SECTION 10. STABILITY AND REACTIVITY			
Chemical stability	The product is stable.		
Possibility of hazardous reactions	Slightly reactive with reducing agents, oxidizers, acids, alkalis and water. It is explosive when mixed with hypochlorites, forming nitrogen trichloride that can explode spontaneously. Do not mix or deposit with ammonium nitrate.		
Conditions to be avoided	High temperatures and humidity.		
Incompatible materials	Incompatible with halogens, hydrogen peroxide, chlorinated hydrocarbons, nitric acid, oxidizing agents and sulfuric acid.		
Hazardous decomposition products	Exposure to high temperatures produces toxic gases by thermal decomposition: ammonia (NH ₃), nitrogen oxides (NO _x), carbon oxides (CO, CO ₂) and water.		
Special Observations	Absorbs umidit from the air. It is hygroscopic. Slow hydrolysis can produce corrosive acids.		

SECTION 11. TOXICOLOGICAL INFORMATION	
Acute toxicity	Acute Oral Toxicity: DL ₅₀ : 8.471 mg/kg (rat - male). 14 300 - 15 000 mg/kg bw (rat)
Skin corrosion/irritation	No adverse effects were observed, (Not irritating).
Serious eye damage/irritation	No adverse effects were observed, (Not irritating).
Respiratory or skin sensitization	No adverse effects were observed, (Not sensitizing).
Germ cell mutagenicity	It is not classified as mutagenic.
Carcinogenicity	Not available. Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA
Reproductive toxicity	Effect on developmental toxicity - Oral: No adverse effects are observed. NOAEL 1000mg / kg of weight / day (subacute, rats).
Specific target organ toxicity –single exposure	It is not classified as toxic.
Specific target organ toxicity –repeated exposure	It is not classified as toxic.
Aspiration hazard	Not applicable, if the exposure limits of inhalable dust are not exceeded.
SECTION 12. ECOTOXICOLOGICAL INFORMATION	
Acute (in aquatic environment)	
Fish	CL ₅₀ 10 -17.86 g/l, 48 hours (fresh water)
Invertebrates	CL ₅₀ 10 g/l, 24 hours (fresh water)
Crustáceos – Chaetogammarus marinus - Joven	CL ₅₀ >1.000 mg/l , 48 hours
Algae	NOEC Not available
Chronical (in aquatic environment)	
Not available	
Toxicity	Low toxicity in aquatic organisms.
Persistence and degradability	Quickly biodegradable. It is not persistent. The decomposition of the product in bodies of water promotes the growth of algae, increasing turbidity, decreasing the concentration of oxygen and preventing photosynthesis.
Bioaccumulative potential	Low bioaccumulation Log _{POW} : <1,73.
Mobility in soil	Earth / water partition coefficient (K _{OC}): 0,037.
Other adverse effects	Not available

SECTION 13. DISPOSAL CONSIDERATIONS	
Disposal methods	Recovery and reuse of the material whenever possible.
Manipulation	Place the material in containers suitable for use or disposal. The corresponding PPEs should be used. Discharge to surface water courses or groundwater should be avoided.
Treatment	Depending on the type of contamination, consult the Medical Service. If the material cannot be recovered and / or reused, it must be treated as a non-hazardous industrial waste.
SECTION 14. TRANSPORT INFORMATION	
International regulations	This product is not classified as dangerous according to the CNRT (Argentina), Mercosur Dangerous Goods Transportation Agreement [Acuerdo Sobre Transporte de Mercancías Peligrosas del Mercosur]. – IATA Not regulated under IATA Standards IMO/ IMDG/ ADN: Not regulated RID/ ADR: Not regulated
Special provisions for transport	Land and sea transport: General cargo
Environmental hazards	IATA: It is not a dangerous substance IMDG: It is not a marine pollutant IMO: It is not a dangerous substance ADN: It is not a dangerous substance RID/ADR: It is not a dangerous substance
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not regulated as hazardous material
UN Number	Not regulated as hazardous material
UN Proper Shipping Name	Not regulated as hazardous material
Hazard class(es) for transportation	Not regulated as hazardous material
SECTION 15. REGULATORY INFORMATION	
Other regulations	Mercosur Dangerous Goods Transportation Agreement [Acuerdo Sobre Transporte de Mercancías Peligrosas del Mercosur] National Health and Safety Law No. 19587/72 National Traffic Law No. 24,449 National Hazardous Waste Law No. 24,051 Regulatory Decree No. 351/79 on Health and Safety Resolution 195/97 Technical Standards Res. MTySS 295/03 Chemical Pollutants SRT Resolution No. 801/15 GHS SRT Resolution No. 3359/15, Extension GHS GHS - Globally Harmonized System of Classification and Labeling of Chemicals. 5th Ed. Revised. United Nations, New York and Geneva, 2013. TOMES Plus®, Vol 28, January 1996 Micomedex Inc.

SECTION 16. OTHER INFORMATION	
Glossary	<p>GHS: Globally Harmonized System. ACGIH: American Conference of Governmental Industrial Hygienists. (USA) AIHA WEEL: Workplace Environmental Exposure Level of the American Industrial Hygiene Association (USA) Carcinogenic: It is said of the physical, chemical or biological agent that induces the development of cancer. Teratogenic: That generates malformations to the fetus. CAS: Chemical Abstract Service. CL50: Lethal Media Concentration. CNRT: National Commission for Transport Regulation DL₅₀: Mean Lethal Dose, CL₅₀: Lethal Media Concentration. EC₅₀: Concentration with effect in 50% of organisms. IARC: International Agency Research on Cancer Mutagenic: Substance or agent that permanently alters the DNA of cells.</p> <p>OECD: Organization for Co-operation and Development. OSHA: Occupational Safety and Health Administration (USA) EPA: Environmental Protection Agency (USA) PEL: Permissible Exposure Limit. TLV: Threshold Limit Value. TWA: Time-weighted average. CMP: Maximum allowable concentration. IATA: International Air Transport Association. IMDG: International Maritime Dangerous Goods (Code). IMO: International Maritime Organization. ADN: European Agreement on the International Transport of Dangerous Goods in Inland Navigation. RID: Regulation of the International Transport of Dangerous Goods by Rail. ADR: "European Agreement on the International Transport of Dangerous Goods by Road".</p>
FOR MORE INFORMATION	CONTACT PROFERTIL SA
Date of the Last Revision	Rev. N° 04 September, 11 2018
Historial of Revision	This document replaces Rev. N° 03 of July 26, 2017, in accordance with the regulations of the GHS and Res. SRT No. 801/15 of Argentina.
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