



MATERIAL SAFETY DATA SHEET

MSDS

DATE: 4/25/2007

NEW [] REVISED [X]

Agrium Advanced Technologies
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EMERGENCY PHONE NUMBERS:
Agrium AT: 1-800-422-4248
CHEMTREC: 1-800-424-9300

SECTION - I - PRODUCT INFORMATION

PRODUCT NAME: **POLYON® Polymer-Coated Urea (PCU) GRADES: 37-0-0, 38.5-0-0, 40-0-0, 41-0-0, 42-0-0, 43-0-0, 44-0-0, 44.5-0-0, 45-0-0**

PRODUCT NUMBER: N/A

Large, Regular, Mini or Micro Sizes

CHEMICAL NAME: Polyurethane-coated Urea

CHEMICAL FAMILY: Amide and Urethane

EPA REGISTRATION NUMBER: NA

EPA ESTABLISHMENT NUMBER: NA

NFPA RATING: Health - 1 Flammability - 0 Reactivity - 0 Special - None

NFPA CODES: 0=Least 1=Slight 2=Moderate 3=High 4=Extreme

SECTION - II - INGREDIENT INFORMATION

INGREDIENT	CAS NUMBER	PEL	TLV	% BY WEIGHT
Urea	57-13-6	NI	NI	78 - 98
Polyurethane coating	NA	NI	NI	2 - 21.5
Pigment	NA	NI	NI	0 - 0.11
Wax	NA	NI	NI	0.3 - 0.5

SECTION - III - PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point: Urea (decomposes), Polyurethane (NA)

Specific Gravity: 1.3 - 1.35

Vapor Pressure (mmHg): Negligible

Melting Point: Urea 132.7°C (270.9°F), Polyurethane (NA)

Vapor Density (Air =1): Negligible

Evaporation Rate(Butyl Acetate=1): NA

Bulk Density: 44-48 lb/ft³

Angle of Repose: 32° - 34°

pH: 7.2 (Crushed sample in H₂O. 10% urea solution)

Solubility in Water: Urea; 100 parts in 100 parts water @ 17°C. Polyurethane coating is water insoluble.

Appearance and Odor: Green, beige, brown, yellow, and/or white fertilizer granules. No appreciable odor.

SECTION - IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point: NA Flammable Limits: LEL: NA UEL: NA

Extinguishing Media: Water spray, dry chemical, CO₂, sand, or fine earth. Material essentially is non-flammable.

Special Fire Fighting Procedures: Wear full protective clothing and self-contained breathing apparatus. Short term exposure to smoke, fumes, and gases can lead to irreversible lung injury without early signs and symptoms. Use extinguishing media suitable for the surrounding fire. Evacuate downwind if large quantities of product are involved in fire.

Unusual Fire and Explosion Hazards: Product will decompose under fire conditions. Decomposition products may be toxic.

SECTION - V - REACTIVITY DATA

Stability: Stable

Incompatibility (Materials to avoid): Keep separate from ammonium nitrate fertilizer, or fertilizers containing same.

Hazardous Decomposition or Byproducts: Thermal degradation may produce cyanuric acid, cyanic acid, biuret, ammonia, hydrogen cyanide, carbon dioxide and nitrogen oxides.

Hazardous Polymerization: Will not occur.

SECTION - VI - HEALTH HAZARD DATA

ACUTE AND CHRONIC HEALTH HAZARDS / EMERGENCY AND FIRST AID PROCEDURES

Route(s) of entry: Inhalation; Ingestion

Eyes: May cause moderate irritation. If eye contact occurs, flush eyes with running water for 15 minutes.

Skin: May cause moderate irritation. Wash with soap and water if irritation occurs.

Inhalation: No appreciable dust with this product, however, if symptoms of moderate irritation to the nose, throat or lungs occur, remove to fresh air.

Ingestion: May cause headache, nausea, and vomiting. Immediately call a physician or Poison Control Center @ (202) 625-3333 for assistance.

Signs and Symptoms of Exposure: Moderate irritation to eyes, skin, or respiratory tract. No chronic health effects data have been established.

Other Health Warnings: Call a physician if irritation persists. Wash hands with soap and water after handling.

Notes to physician: Treat symptomatically.

SECTION - VII - PRECAUTIONS FOR SAFE HANDLING AND USE

Storage: Store in original container in a cool dry area. Keep out of reach of children and domestic animals. Store separately from feed, food, pesticides, seeds and other fertilizers so that cross contamination does not occur.

Procedures in case of spill or release: If material is uncontaminated, collect and reuse as recommended for product. Avoid dusts, or use NIOSH/MSHA approved respirator. Caution should be used when walking through spilled product on a hard floor, since loose granules can create a slip hazard.

Waste Disposal Method: Apply as fertilizer if uncontaminated. If contaminated, dispose of in accordance with all Federal, State, and Local laws.

Other Precautions: Washing facilities should be available.

SECTION - VIII - CONTROL MEASURES

Ventilation Requirements: Provide local or general ventilation if dust exposure exceeds the nuisance dust limit of 10 mg/m³. Applicators should stand up-wind if excess dust is observed.

PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection: None required for normal use of this product. A NIOSH/MSHA approved respirator should be used if dust exposure exceeds level of 10 mg/m³.

Protective Clothing: No protection normally required. Long sleeves and impervious gloves should be worn by those with unusually sensitive skin.

Eye Protection: Use of safety glasses with side shields is recommended.

SECTION - IX - ADDITIONAL INFORMATION

This product is a plant food. However, large spills could possibly kill vegetation or cause illness in animals. Contamination of waterways may cause fish kill. Prevent large quantities from contacting vegetation or waterways. Keep animals away from large spills.

SECTION - X- SARA TITLE III REQUIREMENTS

Section 302 Extremely Hazardous Substances: No	SARA Hazard Category: None
Section 311/312 Hazardous Substances: No	Carcinogenic Compound(s) (IARC/NTP/OSHA/ACGIH): None
Section 313 Toxic Chemicals: No	

OTHER PRECAUTIONS AND COMMENTS

The information in this Material Safety Data Sheet is believed to accurately reflect the scientific evidence used in making the hazard determination. It is considered only as a guide, and not a warranty or representation for which we assume legal responsibility. Independent decisions must be made on the suitability and use of this product dependent on variable storage conditions or locally applicable laws or government regulations. The buyer and user assume all risk and liability of storage, handling, and use of this product not in accordance with the terms of the product label.

NA = NOT APPLICABLE

NI = NOT INDICATED

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Contact: Safety Manager

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