



SAFETY DATA SHEET

1. Identification

Product identifier: PurKote Urea (All Grades)

Other means of identification Product code:
Polymer Coated Urea (All grades)

Synonyms:

30 Day Urea 45-0-0; 45 Day Urea 44.5-0-0; 60 Day Urea 44-0-0; 90 Day Urea 44-0-0; 120 Day Urea 43-0-0; 180 Day Urea 42-0-0; 270 Day Urea 40-0-0; 360 Day Urea 38-0-0

Recommended use: Fertilizer

Recommended restrictions: None Known

Manufacturer/Importer/Supplier/Distributor information Manufacturer/Supplier:

Pursell Agri-Tech LLC.
501 East 3rd Street
Sylacauga, AL 35150

Supplier in Canada: Plant Products Inc
50 Hazelton St.,
Leamington, ON N8H 3W1

Emergency:

CHEMTREC
USA/Canada – 1-800-424-9300

2. Hazard(s) identification

Physical hazards	Not Classified
Health hazards	Not Classified
OSHA defined hazards	Not Classified
<u>Label elements</u>	
Hazard symbol	None
Signal word	None
Hazard statement	The mixture does not meet criteria for classification
<u>Precautionary statement</u>	
Prevention	Observe good industrial hygiene practices
Response	Wash hands after handling
Storage	Store away from incompatible material
Disposal	Dispose of waste and residues in accordance with local authority requirements
Hazard(s) not otherwise classified (HNOC)	None known

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Supplemental information	Not applicable
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3. Composition/information on ingredients

Mixtures

Chemical name	CAS Number	%
Urea	57-13-6	80-100

4. First-aid measures

Inhalation	Move to fresh air. Get medical attention if any discomfort continues. Symptoms: Dust may irritate throat or respiratory system and cause coughing.
Skin contact	Wash contacted areas with soap & water. Get medical attention if irritation develops or persists. Symptoms: Contact with skin may cause mild irritation.
Eye contact	Dust in the eyes: Do not rub eyes. Immediately flush with plenty of water for at least 15 minutes. If easy to do, remove contact lenses. Get medical attention if irritation persists after washing. Symptoms: Symptoms may include irritation, redness, scratching of the cornea.
Ingestion	Rinse mouth thoroughly. Get medical attention if any discomfort continues.
Immediate or special treatment needed:	Treat symptomatically
General Information:	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

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 temperature, but not expected to explode (minimum ignition temperature (cloud) = 900 deg C.

Special protective equipment and precautions for firefighters – 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.

Firefighting equipment/instructions – move containers from fire area if you can do it without risk. Use water spray to prevent dust formation, absorb heat, keep containers cool and protect fire exposed material

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Avoid inhalation of dust and contact with skin and eyes. Ensure adequate ventilation. Wear suitable protective clothing. Use personal protection recommended in Section 8 of the SDS.
Methods and materials for containment and cleaning up	Prevent entry into waterways, sewer, basements or confined areas. Stop the flow of material, if this is without risk. Avoid dust formation. Sweep up or vacuum up spillage and collect in suitable container for disposal. If sweeping of a contaminated area is necessary, use a dust suppressant agent which does not react with the product. After removal flush contaminated area thoroughly with water.
Environmental precautions	Never return spills to original containers for re-use.

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	Prevent further leakage or spillage if safe to do so. Do not contaminate water. Do not allow to enter drains, sewers or watercourses.
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7. Handling and storage

Precautions for safe handling	Avoid inhalation of dust and contact with skin and eyes. Use only with adequate ventilation. Avoid generation and spreading of dust. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Keep container tightly closed. Store in a cool, dry, well-ventilated place. Store away from incompatible materials.

8. Exposure controls/personal protection

Occupational exposure limits

US. ACGIH Threshold Limit Values

Components	Type	Value	Form
Dust	TWA	3 mg/m ³ 10 mg/m ³	Respirable particles Inhalable particles

Biological limit values - No biological exposure limits noted for the ingredient(s)

Appropriate engineering controls - Provide adequate ventilation. Observe Occupational Exposure Limits and minimize the risk of inhalation of dust.

Individual protection measures, such as personal protective equipment:

Eye/face protection - Use tight fitting goggles if dust is generated.

Skin protection:

Hand protection - Risk of contact: Wear protective gloves. Suitable gloves can be recommended by the glove supplier.

Other - Normal work clothing (long sleeved shirts and long pants) is recommended.

Respiratory protection - If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Wear air supplied respiratory protection if exposure concentrations are unknown. In case of inadequate ventilation or risk of inhalation of dust, use suitable respiratory equipment with particle filter. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA 29 CFR 1910.134 and ANSI Z88.2.

Thermal hazards - Wear appropriate thermal protective clothing, when necessary.

General hygiene considerations - 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. Handle in accordance with good industrial hygiene and safety practice.

9. Physical and chemical properties

Appearance: Physical state Form Color	Appearance Solid Granular Solid Brown to dark brown coated with purple, pink, or orange polymer
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Odor	Odorless
Odor threshold	Not available
pH	Not available
Melting point/freezing point	Not available
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
Vapor pressure	Not available
Vapor density	Not available
Partition coefficient (n-octanol/water)	Not available
Auto-ignition temperature	Not available
Decomposition temperature	Not available
Viscosity	Not available
Other information:	
Explosive properties	Not available
Oxidizing properties	Not available

10. Stability and reactivity

Reactivity - Reacts violently with strong oxidants, nitrites, inorganic chlorides, chlorites and perchlorates causing fire and explosion hazard.

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 polymerization does not occur.

Conditions to avoid - Moisture. High temperatures. Contact with incompatible materials.

Incompatible materials - Strong oxidizing agents. Nitric acid. Nitrites.

Hazardous decomposition products - Carbon oxides. Nitrogen oxides (NOx). Ammonia. Biuret.

11. Toxicological information

Information on likely routes of exposure:

Inhalation - High concentrations of dust may irritate throat and respiratory system and cause coughing.

Skin contact - Dust may irritate skin.

Eye contact - Dust may irritate the eyes.

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Ingestion - May cause discomfort if swallowed.
Symptoms related to the physical, chemical and toxicological characteristics - Symptoms can include irritation, redness, scratching of the cornea, and tearing.

Information on toxicological effects

Acute toxicity - May cause discomfort if swallowed.

Components	Species	Test Results
Urea (CAS 57-13-6) Acute Oral LD50	Rat	14300 mg/kg

Skin corrosion/irritation - May cause irritation through mechanical abrasion.
Serious eye damage/eye - May cause irritation through mechanical abrasion. irritation

Respiratory or skin sensitization:

Respiratory sensitization - Based on available data, the classification criteria are not met

Skin sensitization - Not a skin sensitizer

Germ cell mutagenicity - Based on available data, the classification criteria are not met

Carcinogenicity - This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050) - Not listed.

Reproductive toxicity - Based on available data, the classification criteria are not met.

Specific target organ toxicity (single exposure) - Based on available data, the classification criteria are not met.

Specific target organ toxicity (repeated exposure) - Based on available data, the classification criteria are not met.

Aspiration hazard - Not an aspiration hazard.

Chronic effects - Frequent inhalation of dust over a long period of time increases the risk of developing lung diseases.

Further information - No other specific acute or chronic health impact noted.

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
Urea (CAS 57-13-6) Aquatic Fish LC50	Leuciscus idus	>6810 mg/l, 96 hours

Persistence and degradability - No data available

Bioaccumulative potential - No data available

Partition coefficient n-octanol / water (log Kow)

Urea (CAS 57-13-6) -2.11

Mobility in soil - This product is water soluble and may disperse in soil

Other adverse effects - No data available

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13. Disposal considerations

Disposal instructions - Do not allow this material to drain into sewers/water supplies. Dispose in accordance with all applicable regulations.

Hazardous waste code - Not regulated.

Waste from residues / unused products - Disposal recommendations are based on material as supplied. Disposal must be in accordance with current applicable laws and regulations, and material characteristics at time of disposal.

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

14. Transport information

DOT

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 the IBC Code
Not applicable. However, the product is covered under Appendix I of the IMSBC Code

15. Regulatory information

US federal regulations - This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

All components are listed on or exempt from the U.S. EPA TSCA Inventory List.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

Superfund Amendments and Reauthorization Act of 1986 (SARA) Hazard categories:

Immediate Hazard - No

Delayed Hazard - No

Fire Hazard - No

Pressure Hazard - No

Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical

No

SARA 313 (TRI reporting)

Not regulated.

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Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA)

Not regulated.

Food and Drug Administration (FDA)

Not regulated.

Total food additive Direct food additive GRAS food additive

This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

US state regulations

US. Massachusetts RTK - Substance List

Not regulated.

US. New Jersey Worker and Community Right-to-Know Act

Not listed.

US. Pennsylvania Worker and Community Right-to-Know Law

Not listed.

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

Not Listed.

International Inventories Country(s) or region

United States & Puerto Rico

Inventory name

Toxic Substances Control Act (TSCA) Inventory

On inventory (yes/no)*

Yes

*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).

16. Other information, including date of preparation or last revision

Issue date: 14-Aug-18

Revision date: -

Version # 01

Further information - HMIS® is a registered trade and service mark of the NPCA. A HMIS® Health rating including an

* indicates a chronic hazard.

HMIS® ratings NFPA ratings

Health: 1

Flammability: 0

Physical hazard: 0

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List of abbreviations

References:

LC50: Lethal Concentration, 50%.

LD50: Lethal Dose, 50%.

ECHA CHEM

EPA: Acquire database

HSDB® - Hazardous Substances Data Bank RTECS

Disclaimer

NOTICE: The information presented herein is based on data considered to be accurate as of the date of preparation of this Safety Data Sheet (SDS) and was prepared pursuant to Government regulation(s) that identify specific types of information to be provided. 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 foregoing 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 herein with respect to 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. No responsibility can be assumed by vendor for any damage or injury resulting from abnormal use, from any failure to adhere to recommended practices, or from any hazards inherent in the nature of 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 specifically should advise all of their employees, agents, contractors and customers who will use the product of this (M)SDS.