SAFETY DATA SHEET

1. Identification

Product identifier: PurKote NPK 22-7-10 Fertilizer (All Grades)

Other means of identification Product code:
Polymer Coated NPK 22-7-10 (All grades), Polymer Coated NPK 20-6-9, Polymer Coated NPK 19-6-8, Polymer Coated NPK 18-5-8

Synonyms:
Polymer Coated NPK 22-7-10 (All grades), Polymer Coated NPK 20-6-9, Polymer Coated NPK 19-6-8, Polymer Coated NPK 18-5-8

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

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
Label elements	
Hazard symbol	None
Signal word	None
Hazard statement	The mixture does not meet criteria for classification
Precautionary statement	
Prevention	Observe good industrial hygiene practices
Response	Wash hands after handling
Storage	Not Applicable
Disposal	Dispose of waste and residues in accordance with local authority requirements
Hazard(s) not otherwise classified (HNOC)	Product forms slippery surface when combined with water

Supplemental information	Not applicable

3. Composition/information on ingredients

Mixtures

Chemical name	CAS Number	%
ammonium nitrate	6484-52-2	Between 35-50
Potassium nitrate	7757-79-1	Between 15-30
Ammonium sulfate	7783-20-2	Between 10-15
Diammonium hydrogen orthophosphate (DAP)	7783-28-0	Between 10-15
Magnesium oxide	1309-48-4	Between 1-5
Calcium sulfate	7778-18-9	Between 1-5
Ethylenediaminetetraacitic acid, ferric sodium complex	15708-41-5	Between 1-5
Calcium bis (dihydrogen orthophosphate)	7758-23-8	Between 1-2.5
Manganese sulfate	10034-96-5	Between 0.01-0.5
Disodium tetraborate penthydrate	12179-04-3	Between 0.01-0.5
Calcium hydrogen orthophosphate	7757-93-9	Between 0.01-0.5

4. First-aid measures

Inhalation	Move to fresh air keep comfortable for breathing. Symptoms: No known significant effects or critical hazards.
Skin contact	Wash contacted areas with soap & water. Get medical attention if irritation develops or persists. Symptoms: No known significant effects or critical hazards.
Eye contact	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: Dust from this product may cause eye irritation
Ingestion	Do Not induce vomiting. Rinse mouth. Get medical attention/advice if you fell unwell. Symptoms: If ingested in large quantities gastro-intestinal disorders can occur. In extreme cases, formation of methaemoglobin – “Blue baby syndrome” – and cyanosis may occur.
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. Flooding quantities of water may be used for extinction.
Unsuitable extinguishing media – CO2, Foam, Sand
Specific hazards arising from the chemical – Thermal decomposition generates toxic vapors. Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries.

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. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Firefighting equipment/instructions – Self-contained breathing apparatus with full face-piece operated in positive pressure mode, and full protective clothing must be worn in case of fire.

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 and properly label for disposal. Dispose of via a licensed waste disposal contractor. Prevent entry into sewers, water courses, basements, or confined areas.
Environmental precautions	Never return spills to original containers for re-use. Prevent further leakage or spillage if safe to do so. Do not contaminate water. Do not allow to enter drains, sewers or watercourses.

7. Handling and storage

Precautions for safe handling	Eating, drinking, and smoking should be prohibited in areas where this material is handled, stored, and processed. Workers should wash hands and face before eating, drinking, and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also section 8 for addition information and personal protective equipment. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool, and well-ventilated area, way from incompatible materials (see section 10). Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled container. Use appropriate containment to avoid environmental contamination. Keep away from: organic materials, oil and grease.

8. Exposure controls/personal protection

Occupational exposure limits

Ingredient name:	Exposure limits:
Manganese Sulfate (10034-96-5)	Mg/m³ 0.2 TWA General non-hazardous dust exposure limit TLV-TWA 10mg/m3 (inhalable particles)
Personal Protection - Respiratory Protection	No special respiratory protection equipment is recommended under normal conditions of use with adequate ventilation. Where excessive dust may result, wear approved mask.
- Hand Protection	In case of repeated or prolonged contact wear gloves.

- Skin Protection	If repeated skin contact or contamination of clothing is likely, protective clothing should be worn. Protective clothing and chemical resistant gloves (nitrile rubber, chloroprene rubber, butyl rubber or other suitable gloves, complying with the requirements of EN 374 (breakthrough time:480 min; thickness: 0.6-0.8 mm; seek advice from glove supplier).)
- Eye Protection	Where excessive dust may result, wear goggles
- Ingestion	When using do not eat, drink, or smoke.
- Industrial hygiene	Provide local exhaust or general room ventilation. General non-hazardous dust exposure limit TLV-10mg/m3

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

Environmental Exposure controls – Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume, scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures, such as personal protective equipment:
Eye/face protection – Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases, or dusts.
Skin protection:
Hand protection - Risk of contact: Wear protective gloves. Suitable gloves can be recommended by the glove supplier.
Body protection – Personal protective equipment for the body should be selected based on the task being performed and the risks involved.
Other - Normal work clothing (long sleeved shirts and long pants) is recommended. Proper footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved.
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 Odor	Appearance Solid Granular Solid Light

Odor threshold	Not available
pH	(10%) > 4.5
Melting point/freezing point	Decomposes below melting point; Decomposition before boiling
Evaporation rate	Not applicable
Flammability (solid, gas)	Not available
Upper/lower flammability or explosive limits	Not available
Flammability limit - lower (%)	Not available
Flammability limit - upper (%)	Not available
Vapor pressure	Not available
Vapor density	
Partition coefficient (n-octanol/water)	Not available
	Not available
Auto-ignition temperature	Not available
Decomposition temperature	>130ºC
Viscosity	Not available
Other information:	
Explosive properties	Not available
Oxidizing properties	Not available

10. Stability and reactivity

Reactivity – Product is stable under normal conditions of storage, handling and use.

Chemical stability – The product is stable

Possibility of hazardous reactions – Under normal conditions of storages and use, hazardous reaction will not occur

Conditions to avoid – Heat, open flame, prevent contamination by irrelevant materials.

Incompatible materials – Organic materials, reducing agents, acids, alkalis, oxidizing agents, chlorides, nitrites, metallic powders, and substances containing metals such as: copper, nickel, cobalt, zinc and their alloys.

Hazardous decomposition products – Thermal decomposition generates: Ammonia, Nitrogen oxides.

11. Toxicological information

Information on toxicological effects

Rat oral LD50 mg/kg No Data available

Germ cell mutagenicity - Not classified (Based on available data, the classification criteria are not met)

Carcinogenicity - Not classified (Based on available data, the classification criteria are not met)

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 - Not classified (Based on available data, the classification criteria are not met)
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
Manganese Sulfate 10034-96-5 LC50	 Fish (mg/l) 96 hour	Low toxicity to aquatic life No data available

Persistence and degradability - No data available
Bio-accumulative potential - The product does not show any bio-accumulative phenomena

Manganese Sulfate (CAS 10034-96-5)

Mobility in soil – Not available
Other adverse effects – No known significant effects or critical hazards

13. Disposal considerations

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

Methods of disposal – The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer. Waste packaging should. Be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

14. Transport information

DOT
Not regulated as dangerous goods.
IATA
Not regulated as dangerous goods.
IMDG

Not regulated as dangerous goods.

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
Delayed (Chronic) Health hazard
SARA 313 (TRI reporting)
Form R: Reporting requirements – Nitric acid ammonium 6484-52-2 Concentration: 35-65
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: 13-Sept-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

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.