

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Product form	: Mixture
Product name	: Farm Gro Fertilizer
Product Components	: Diammonium Phosphate CAS# 7783-28-0 Monoammonium Phosphate CAS# Potash CAS# Urea CAS# 57-13-6 Ammonium Sulfate CAS# Dolomitic Limestone CAS# 1317-65-3 SCU 39-0-0
Product group	: Commercial product
Synonyms	: Urea Granular; Urea Microprills; Urea Pastille; Urea Prills;

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/preparation : Fertilizer

1.3. Details of the supplier of the safety data sheet

Centerra Co-op
813 Clark Ave
Ashland, OH 44805
T 419-281-2153
<http://www.centerracoop.com/facts-forms/> - <http://www.centerracoop.com/>

1.4. Emergency telephone number

Emergency number : 800-424-9300
CHEMTREC

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture****GHS-US classification**

Skin Irrit. 2	H315
Eye Irrit. 2A	H319
STOT SE 3	H335
Aquatic, Acute 2	H401

2.2. Label elements**GHS-US labelling**

Hazard pictograms (GHS-US) :



GHS07

Signal word (GHS-US) : Warning

Hazard statements (GHS-US) : H315 - Causes skin irritation
H319 - Causes serious eye irritation
H335 - May cause respiratory irritation
H350 - May Cause cancer if inhaled
H372 – Causes damage to organs through prolonged or repeated exposure
H401 - Toxic to aquatic life

Precautionary statements (GHS-US) : P201 Obtain special instructions before use
P261 - Avoid breathing dust
P264 - Wash hands thoroughly after handling
P271 - Use only outdoors or in a well-ventilated area.
P280 - Wear eye protection, protective gloves, protective clothing
P302+P352 - IF ON SKIN: Wash with plenty of water
P304+P340 – IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
P312 - Call a POISON CENTER or doctor/physician if you feel unwell
P332+P313 - If skin irritation occurs: Get medical advice/attention
P337+P313 - If eye irritation persists: Get medical advice/attention
P362 - Take off contaminated clothing
P403+P233 - Store in a well-ventilated place. Keep container tightly closed
P405 - Store locked up
P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations

2.3. Other hazards

Hazardous to the aquatic environment

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	% by weight	GHS-US classification
Urea	(CAS No.) 57-13-6	0-100	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335
Monoammonium Phosphate		0-100	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335
Diammonium Phosphate	(CAS No.) 7783-28-0	0-100	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 STOT SE 3, H335 Aquatic, 2, H401
Potash		0-100	Eye Irrit. 2B, H320

Ammonium sulfate		0-100	Aquatic 3, H402
Dolomitic limestone	(CAS No.) 1317-65-3	0-100	Carcinogen 1A, H350 STOT RE 1, H372
SCU 39-0-0		0-100	Skin Irrit. 2, H315

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : If medical advice is needed, have product container or label at hand.
- First-aid measures after inhalation : If inhaled, remove from source of exposure to fresh air and keep at rest in a position comfortable for breathing. Give oxygen or artificial respiration if necessary. Obtain medical attention if breathing difficulty persists. Symptoms may be delayed.
- First-aid measures after skin contact : Wash skin thoroughly with mild soap and water. For contact with molten product, do not remove clothing. Flush skin immediately with cold water. Obtain medical attention if irritation develops or persists. Wash contaminated clothing before reuse.
- First-aid measures after eye contact : Rinse with water for several minutes while holding the eyelids wide open to ensure thorough rinsing. Obtain medical attention immediately if irritation develops or persists.
- First-aid measures after ingestion : Do not induce vomiting. Seek medical attention if a large amount is swallowed.

4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries : Irritation to eyes, skin and respiratory tract.
- Symptoms/injuries after inhalation : Overexposure may be irritating to the respiratory system.
- Symptoms/injuries after skin contact : May cause skin irritation.
- Symptoms/injuries after eye contact : May cause eye irritation.
- Symptoms/injuries after ingestion : If a large quantity has been ingested : Abdominal pain. Diarrhea. Nausea. Vomiting. May cause drowsiness and loss of coordination.

4.3. Indication of any immediate medical attention and special treatment needed

Immediate medical treatment should not be required

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Not considered flammable but will burn at high temperatures . Use extinguishing media appropriate for surrounding fire.
- Unsuitable extinguishing media : None known.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Decomposes above 132.6 °C (270.7 °F). Under conditions of fire this material may produce: Ammonia; Nitrogen oxides; Biuret.

- Explosion hazard : Product is not explosive. May form explosive mixtures if mixed with strong acid (Nitric / Perchloric) and strong oxidizers.

Reactivity : Stable at ambient temperature and under normal conditions of use.

5.3. Advice for firefighters

- Firefighting instructions : Material burns with difficulty. Becomes slippery when wet – guard against slips and falls.
- Protection during firefighting : Wear full fire-fighting turn-out gear (full Bunker gear) and NIOSH approved respiratory protection (SCBA) with full face piece and protective clothing. May form explosive mixtures if mixed with strong acid (Nitric / Perchloric).
- Other information : Do not allow run-off from fire fighting to enter drains or water courses. Provide local or general ventilation to keep below nuisance dust limit of 15 mg/m³.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Avoid breathing dust. Avoid contact with spilled material. Ventilate area. Evacuate unnecessary personnel. If possible, stop flow of product. Contain and collect as any solid. Wear suitable protective clothing and equipment as described in Section 8 of this SDS

6.1.1. For non-emergency personnel

- Protective equipment : Wear suitable protective clothing, gloves and eye/face protection including tight fitting goggles to prevent eye contact. Do not wear contact lenses when working with this substance. Normally no respiratory equipment needed. Use NIOSH approved equipment when airborne dust exposure limits are exceeded. NIOSH approved breathing equipment must be available for non-routine and emergency use.
- Emergency procedures : Collect as any solid. Ventilate area. Evacuate unnecessary personnel.

6.1.2. For emergency responders

- Protective equipment : Wear suitable protective clothing, gloves and eye/face protection including tight fitting goggles to prevent eye contact. Do not wear contact lenses when working with this substance. Normally no respiratory equipment needed. Use NIOSH approved equipment when airborne dust exposure limits are exceeded. NIOSH approved breathing equipment must be available for non-routine and emergency use.
- Emergency procedures : If possible, stop flow of product. Contain and collect as any solid. Ventilate area. Evacuate unnecessary personnel.

6.2. Environmental precautions

If spill could potentially enter any waterway, including intermittent dry creeks, contact the U.S. COAST GUARD NATIONAL RESPONSE CENTER at 800-424-8802. In case of accident or road spill notify CHEMTREC at 800-424-9300. In other countries call CHEMTREC at (International code) +1-703-527-3887.

6.3. Methods and material for containment and cleaning up

- For containment : If contaminated with other materials, contain and collect as any solid in suitable containers. Do not allow into drains or water courses or dispose of where ground or surface waters may be affected. Prevent large quantities from contacting vegetation.

Methods for cleaning up : Recover the product by vacuuming, shoveling or sweeping and place in appropriate container to be disposed at an appropriate disposal facility according to current applicable laws and regulations and product characteristics at the time of disposal. Provide adequate ventilation. Avoid generation of dust during clean-up of spills. If uncontaminated, recover and reuse product.

Practice good housekeeping – spillage can be slippery on smooth surface either wet or dry.

6.4. Reference to other sections

See Section 8 for Protective Equipment and Section 13 for disposal.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Avoid contact with skin and eyes. Avoid breathing dust. Wear recommended personal protective equipment. Avoid creating or spreading dust.

Hygiene measures : Handle in accordance with good industrial hygiene and safety procedures.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store bags or other containers tightly closed in a dry, cool and well-ventilated place away from heat, sources of ignition, and incompatibilities. Protect from moisture. Avoid contamination with other “look alike” materials that may produce a fire or explosion.

Incompatible materials : Avoid containers, piping or fittings made of brass, bronze or other copper bearing alloys or galvanized metals.

7.3. Specific end use(s)

Agricultural chemical.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Fertilizer Blend/Farm Gro Fertilizer		
USA ACGIH (nuisance dust)	ACGIH TWA (mg/m ³)	10 mg/m ³ – inhalation particulate
USA OSHA (nuisance dust)	OSHA PEL (TWA) (mg/m ³)	5 mg/m ³ – Respirable (particulate) Fraction: urea

8.2. Exposure controls

Appropriate engineering controls : Ensure adequate ventilation, especially in confined areas to keep below nuisance dust limit of 15 mg/m³. Provide ventilation in order to maintain exposure below exposure limits. Use local exhaust (ventilation) to minimize personnel exposure to airborne concentrations.

Personal protective equipment : Gloves. Safety glasses. Protective clothing.



Hand protection : Impermeable protective gloves.

Eye protection	: Protective goggles.
Skin and body protection	: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Wear suitable protective clothing. Wash contaminated clothing before reuse. Handle in accordance with good industrial hygiene and safety practice.
Respiratory protection	: Use NIOSH-approved air-purifying or supplied-air respirator where airborne concentrations of dust are expected to exceed exposure limits. NIOSH approved breathing equipment must be available for non-routine and emergency use.
Environmental exposure controls	: Ensure adequate ventilation, especially in confined areas.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Granules
Colour	: Various
Odour	: Slight ammonia
Odour threshold	: No data available
pH	: No data available
Molecular weight	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: Decomposes above 132.6 °C (270.7 °F)
Freezing point	: No data available
Boiling point	: No data available
Flammability (solid, gas)	: Non-flammable
Flash point	: No data available
Self ignition temperature	: No data available

Decomposition temperature	: Decomposes above 132.6°C (270.7 °F)
Vapour pressure	: 80 Pa at 20°C
Relative vapour density at 20 °C	: No data available
Specific Gravity (Water = 1)	: No data available
Density	: No data available

Bulk Density	: No data available
Solubility	: No data available
Log Pow	: No data available
Log Kow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available.
Oxidizing properties	: No data available
Explosive limits	: Product is not explosive

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable at ambient temperature and under normal conditions of use.

10.2. Chemical stability

Stable at standard temperature and pressure.

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Protect from moisture. May slowly hydrolyze to ammonium carbamate and eventually decompose to ammonia and carbon dioxide.

10.5. Incompatible materials

May form explosive mixture if in contact with strong acid such as nitric or perchloric acids. Avoid contact with: strong oxidizers ; strong acids or bases ; nitrates ; hypochlorites. Reacts with sodium or calcium hypochlorite to form explosive nitrogen trichloride.

10.6. Hazardous decomposition products

Under conditions of fire this material may produce: Nitrogen oxides; Ammonia; Biuret; Carbon oxides

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Urea (57-13-6)	
LD50 oral rat	8471 mg/kg
LD50 oral rat	14,300 mg/kg-male; 15,000 mg/kg-female
LD50 oral mouse	11,500 mg/kg-male; 13,000 mg/kg-female

(MAP) Monoammonium phosphate	
LD50 oral rat	> 2000 mg/kg OECD Guideline 425
LD50 dermal rat	> 5000 mg/kg OECD Guideline 402
Additional information	This compound is listed by the FDA as generally recognized as safe (GRAS) and may be used as a food additive, for both human food and ruminant feed, according to prescribed conditions.

Ammonium Sulfate Granular	
LD50 oral rat	4250 mg/kg
LD50 dermal rat	> 2000 mg/kg

(DAP) Diammonium phosphate (7783-28-0)	
LD50 oral rat	6500 mg/kg
LD50 dermal rabbit	> 7950 mg/kg
Additional information	This compound is listed by the FDA as generally recognized as safe (GRAS) and may be used as a food additive, for both human food and ruminant feed, according to prescribed conditions.

Potash	
Additional information	Potassium chloride is listed by the FDA as "Generally Recognized as Safe" (GRAS) and may be used as a food additive according to prescribed conditions.

Dolomitic Lime	
Additional information	Potassium chloride is listed by the FDA as "Generally Recognized as Safe" (GRAS) and may be used as a food additive according to prescribed conditions.

SCU 39-0-0	
LD50 oral rat	14,300 mg/kg
LD50 dermal rat	> 2000 mg/kg, 24 hours

Skin corrosion/irritation : Causes skin irritation.

Serious eye damage/irritation : Causes eye irritation.

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Bacterial Genetic Toxicity Invitro:
Gene Mutation:
Salmonella typhimurium - Bacterial reverse mutation assay: Negative
Chinese Hamster – Chromosomal aberration test: Positive (very high dose);
Mouse: Positive (very high dose).
Non-Bacterial Genetic Toxicity In-Vitro: Chromosomal Aberration:
Mouse – Bone Marrow Cytogenetic test: Positive (extremely high dose)
OECD 471: Bacterial reverse mutation assay, *S. typhimurium*: Negative
OECD 473: Chromosome aberration test, Chinese hamster ovaries:
Negative

Carcinogenicity	: Not classified
Reproductive toxicity	: Toxicity to Reproduction: No toxic effects on mouse gonads up to 6,750 mg/kg/day. No toxic effects on rat gonads up to 2,250 mg/kg/day. Developmental Toxicity / Teratogenicity: Not teratogenic.
Specific target organ toxicity (single exposure)	: May cause respiratory irritation.
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified

SECTION 12: Ecological information

Non-mandatory section, no information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Sewage disposal recommendations	: This material is hazardous to the aquatic environment. Keep out of sewers and waterways.
Waste disposal recommendations	: Place in an appropriate container and dispose of the contaminated material at a licensed site.
Additional information	: Dispose of waste material in accordance with all local, regional, national, and international regulations.

SECTION 14: Transport information

In accordance with DOT / TDG / ADR / RID / ADNR / IMDG / ICAO / IATA

14.1. UN number

No dangerous good in sense of transport regulations.

14.2. UN proper shipping name

Not applicable

14.2 Additional information

Other information : No supplementary information available.

Overland transport

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

15.1. US Federal regulations

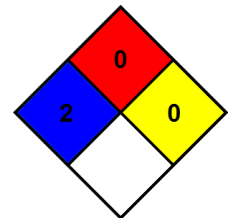
Fertilizer Blend/Farm Gro Fertilizer	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard
Fertilizer Blend/Farm Gro Fertilizer	
Ingredients listed on the United States TSCA (Toxic Substances Control Act) inventory	
U.S. - FIFRA - Inert Ingredients Eligible for FIFRA Section 25(b) Pesticide Products	Urea
Fertilizer Blend/Farm Gro Fertilizer	
Ingredients listed on the United States TSCA (Toxic Substances Control Act) inventory	

15.2. US State regulations

No additional information available

SECTION 16: Other information

NFPA health hazard	: 2 - Intense or continued exposure could cause temporary incapacitation or possible residual injury unless prompt medical attention is given.
NFPA fire hazard	: 0 - Materials that will not burn.
NFPA reactivity	: 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



Full text of H- phrases:

Eye Irrit. 2	Serious eye damage/eye irritation Category 2
Skin Irrit. 2	skin corrosion/irritation Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H335	May cause respiratory irritation

SDS US (GHS HazCom 2012)

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