

Material Safety Data Sheet
J. R. Simplot Company
AgriBusiness

M74174M

Trade Name: Cascade K
Registration No: None

SECTION 1 CHEMICAL PRODUCT AND COMPANY INFORMATION

Manufacturer or Formulator:	J.R. Simplot Company P.O. Box 70013 Boise, ID 83707	Product Name:	Cascade K
		Common Name:	21-0.8-17.4
Emergency Phone - Chemtrec:	1-800-424-9300	Chemical Type:	Inorganic Chemical Fertilizer

SECTION 2 COMPOSITION INFORMATION

Chemical Name and Synonyms	C.A.S. No.	Chemical Formula	WT% Hazardous	TLV	PEL
None listed					
Non-Hazardous					
Polyon Urea	57-13-6	CO(NH ₂) ₂	40.5%	Not available 10 mg/m ³ Nuisance Dust	15mg/m ³ Nuisance Dust
Polyurethane Coating	--	--			
Muriate of Potash	7447-40-7	KCl	36%	10 mg/m ³ Nuisance Dust	15mg/m ³ Nuisance Dust
Mono-Ammonium Phosphate Sulfate			23.5%	10 mg/m ³ Nuisance Dust	15mg/m ³ Nuisance Dust
Ammonium Phosphate	7722-76-1	NH ₄ H ₂ PO ₄			
Ammonium Sulfate	7783-20-2	(NH ₄) ₂ SO ₄			

SECTION 3 HAZARDS IDENTIFICATION

Ingestion: Minimal hazard under normal conditions and use. Ingestion of large quantities may cause gastrointestinal discomfort, vomiting, weakness or other medically related problems.

Inhalation: Dusty conditions may cause mechanical aggravation to respiratory mucous membranes.

Eye Contact: Dust from this product may cause particulate discomfort to eyes.

Skin Absorption: Not normally absorbed through the skin.

Skin Contact: Slight dermal abrasion is possible with prolonged contact, especially around cuffs and collars.

Effects of Overdose: Ingestion of large doses may cause diarrhea, nausea, abdominal cramps or formation of methemoglobinemia. Seek medical attention.

SECTION 4 FIRST AID MEASURES

Ingestion: If large amount is ingested, give 2-3 glasses of water and induce vomiting. Seek medical attention.

Inhalation: Remove to fresh air. Seek medical attention if condition persists.

Eyes: Flush eyes with running water for at least 15 minutes. Seek medical attention if condition persists.

Skin: Wash with soap and water. Seek medical attention if condition persists.

Notes to Physician: Consult standard literature. Treatment based on the sound judgment of the physician and the individual reactions of the patient.

SECTION 5 FIRE FIGHTING MEASURES

Extinguishing Media: Use media suitable to extinguish source of fire.

Special Fire Fighting Procedures: Product is not combustible.

Unusual Fire and Explosion Hazards: During extremely high temperature fire conditions, the product may reach melting point and decompose to release NH₃, SO_x, PO_x or CN.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Environmental Precautions: Keep out of water supplies, lakes, ponds, streams and rivers. This product is a fertilizer and may promote algae growth.

Steps to be taken in case material is released or spilled:
Keep from entering waterways. Sweep up material and place in suitable container for use as a fertilizer or for disposal.

SECTION 7 HANDLING AND STORAGE

Precautions to be taken in handling and storing:
Store in a cool, dry area. Prevent spillage and separate from strong oxidizers. Use normal safety procedures and good personal hygiene. Keep out of the reach of children.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Ventilation Protection: Adequate ventilation.

Respiratory Protection: Approved dust respirator when necessary.

Protective Clothing: Normal clean work clothing.

Eye Protection: In dusty conditions, safety glasses with side shields or goggles may be necessary.

Trade Name: Cascade K
Registration No: None

M74174M

SECTION 9

PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point:	Not applicable	Solubility in Water:	Approx. 60gm/110gm H ₂ O @ 78°F
Density:	60-63 lbs/ft ³	% Volatiles (by volume):	Not applicable
Flashpoint:	Non-flammable	Vapor Pressure, mm Hg:	Not applicable
pH:	Not listed	Reaction with Water:	None
Appearance:	Multi-colored granules.		
Extinguishing Media:	Use media suitable to extinguish source of fire.		

SECTION 10

STABILITY AND REACTIVITY

Stability (Normal Conditions): Stable
Conditions to Avoid: Extremely high temperatures.
Incompatibility (Material to Avoid): Strong oxidizing agents. Prolonged contact may cause oxidation of unprotected metals.
Hazardous Decomposition Products: During extremely high temperature fire conditions, the product may reach melting point and decompose to release NH₃, SO_x, PO_x or CN.
Hazardous Polymerization: Will not occur

SECTION 11

TOXICOLOGY INFORMATION

	<u>Oral LD50 (rat)</u>	<u>Dermal LD50 (rat)</u>	<u>Aquatic Fish 96-hour</u>	<u>Aquatic (other)</u>
Monoammonium Phosphate	>2,000 mg/kg	>5,000 mg/kg	> 86 mg/L (rainbow trout)	none listed
Ammonium Sulfate	640-4,250 mg/kg	> 2,000 mg/kg	> 13.6-159.8 mg total NH ₃ /L	> 27.0 mg/total NH ₃ /L (daphnia)
Potassium Chloride	1,500-2,600 mg/kg	none listed	2,010 mg/L	none listed
Urea	14,300 mg/kg	none listed	> 9,100 mg/L	> 10,000 mg/L (daphnia)

All toxicity data from TFI Product Testing Results.

SECTION 12

ECOLOGICAL INFORMATION

None listed.

SECTION 13

DISPOSAL CONSIDERATIONS

Waste Disposal Procedures: Pick up with a shovel and broom and use as a fertilizer by applying to soil using good agricultural and soil management.

SECTION 14

TRANSPORT INFORMATION

Shipping name:	Not regulated by DOT	C.A.S. Number:	See "Ingredients"
Hazard Class:	None	D.O.T. Number:	None
Reportable Quantity (RQ):	None	Haz Waste No:	None
Labels Required:	None	EPA Regist No:	None
Placard:	None		

SECTION 15

REGULATORY INFORMATION

Carcinogenicity: by IARC?: Yes () No (X) by NTP?: Yes () No (X)

Not on the 302 list of SARA reportable quantities.

SECTION 16

OTHER INFORMATION

Flash Point (Test Method):	Non-flammable	Flammable Limits	LOWER	UPPER
Autoignition Temperature:	Not applicable	(% BY VOLUME)	N/A	N/A

MSDS Version Number: 4 (revisions to Section 2)

Disclaimer: This information relates to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is to the best of our knowledge and belief, accurate and reliable as of the date compiled. However, no representation, warranty or guarantee is made as to its accuracy, reliability or completeness. **NO WARRANTY OF MERCHANTABILITY, FITNESS FOR ANY PARTICULAR PURPOSE, OR ANY OTHER WARRANTY, EXPRESS OR IMPLIED, IS MADE CONCERNING THE INFORMATION HEREIN PROVIDED.** It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use. We do not accept liability for any loss or damage that may occur from the use of this information nor do we offer warranty against patent infringement.