

Material Safety Data Sheet
J. R. Simplot Company
AgriBusiness

M74081

Trade Name: Nitra King® 22-3-9
Registration No: None

SECTION 1 CHEMICAL PRODUCT AND COMPANY INFORMATION

Manufacturer or Formulator: J.R. Simplot Company
P.O. Box 70013
Boise, ID 83707
Emergency Phone - Chemtrec: 1-800-424-9300

Product Name: Nitra King® 22-3-9
Common Name: 22-3-9
Chemical Type: Inorganic Chemical Fertilizer

SECTION 2 COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name and Synonyms	C.A.S. No.	Chemical Formula	WT% Hazardous Non-Hazardous	TLV	PEL
Ammonium Nitrate	6484-52-2	NH ₄ NO ₃	46	10 mg/m ³ Nuisance Dust	Not available
This is a homogeneous granular product containing:					
Ammonium Sulfate	7783-20-2	(NH ₄) ₂ SO ₄	54		Not available
Monoammonium Phosphate	7722-76-1	NH ₄ H ₂ PO ₄		10 mg/m ³ Nuisance Dust	
Ferrous Oxysulfate	not listed	not listed			
Sulfate of Potash	7778-80-5	K ₂ SO ₄			

SECTION 3 HAZARDS IDENTIFICATION

Ingestion: Large amounts of ingested nitrates may cause gastrointestinal discomfort.
Inhalation: May cause discomfort to the respiratory tract.
Eye Contact: May cause severe particulate discomfort from Ferrous Sulfate.
Skin Absorption: Not absorbed through skin. Prolonged contact may cause abrasion to skin.
Skin Contact: May cause abrasion to the skin with prolonged contact especially around cuffs and collars.
Effects of Overdose: Large amount of ingested nitrates may cause dizziness, abdominal cramps, vomiting, bloody diarrhea, weakness, convulsions, collapse.

SECTION 4 FIRST AID MEASURES

Ingestion: Give 2-3 glasses of water and induce vomiting. Call a physician.
Inhalation: Minimal hazard under normal conditions. Remove to fresh air. Seek medical attention if condition persists.
Eyes: Flush eyes with fresh running water for 15 minutes. See medical attention if condition persists.
Skin: Wash with soap and water. Seek medical attention if condition persists.

SECTION 5 FIRE FIGHTING MEASURES

Extinguishing Media: Use water in large amounts to cool material and extinguish source of fire. Ventilate well. Do not use salt water, carbon dioxide, dry chemicals, or other smothering agents.
Special Fire Fighting Procedures: Evacuate area downwind of fire. Immediately ventilate the structure. Wear self-contained breathing apparatus and protective clothing for protection against hazardous fumes and molten material.
Unusual Fire and Explosion Hazards: Although this product contains ammonium nitrate, it is not an oxidizer as tested in accordance with 49 CFR 173.127 (using Appendix F) oxidizer testing procedures because it also contains ammonium phosphate which is a fire retardant. When heated to decomposition, it can emit hazardous fumes of NO_x, SO_x, and NH₃.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Environmental Precautions: Keep out of lakes, streams, rivers, etc.
Steps to be taken in case material is released or spilled: Keep public away. Sweep up and scoop into a container for use, recycle or disposal. Can be used as a fertilizer by applying to soil using good agricultural and soil management.

SECTION 7 HANDLING AND STORAGE

Precautions to be taken in handling and storing:
Store in a dry, unconfined location. Avoid exposure to heat or ignition sources. Do not contaminate with oil or other burnable materials. Avoid contact with eyes and skin. Avoid prolonged breathing of dust. Keep out of reach of children. Avoid contact with incompatible materials. Avoid exposure to heat sources or source of ignition. Do not store near food stuffs.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Ventilation Protection: Adequate ventilation to control dust.
Respiratory Protection: Dust mask in a dusty environment.
Protective Clothing: Normal work clothing.
Eye Protection: Safety glasses with side shields.
Other: Eyewash fountain in area.

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SECTION 9

PHYSICAL AND CHEMICAL PRODUCT

Boiling Point:	Decomposes	Solubility in Water:	Complete
Density:	Not available	% Volatiles (by volume):	0
Flashpoint:	Not combustible	Vapor Pressure, mm Hg:	Not applicable
pH:	None listed	Reaction with Water:	None
Appearance:	Granules.		
Extinguishing Media:	Water spray. Do not use salt water, carbon dioxide, dry chemicals, or other smothering agents.		

SECTION 10

STABILITY AND REACTIVITY

Stability (Normal Conditions): Stable
Conditions to Avoid: Heat, fire and contaminants such as oil.
Incompatibility (Material to Avoid): Acetic acids, metals (powdered), chlorides, organic matter, phosphorous, sodium, sulfur, inorganic zinc.
Hazardous Decomposition Products: When heated to decomposition, it can emit hazardous fumes of NO_x, SO_x, and NH₃.
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 Nitrate	1,480-1,770 mg/kg	> 5,000 mg/kg	95-102 mg/kg total NH ₃ /L	124.9 mg total NH ₃ /L (daphnia)
Inhalation 4 hour LC₅₀:	> 88,800 mg/m ³			
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 Sulfate	6,600 mg/kg	none listed	680-3,550 mg/L	720-890 mg/L (daphnia)

All toxicity data from TFI Product Testing Results.

SECTION 12

ECOLOGICAL INFORMATION

None listed.

SECTION 13

DISPOSAL CONSIDERATIONS

Waste Disposal Procedures: Apply as a fertilizer if uncontaminated. Use or dispose of at an approved disposal site.

SECTION 14

TRANSPORT INFORMATION

Shipping name:	Not regulated by D.O.T. - see statement below	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		

When air or water transport is involved, it is a Class 9 hazardous material, UN2071 per 49 CFR 172.101. When only land transportation is involved, materials fitting within the UN2071 description are not hazardous and are not regulated by D.O.T. Hence, shipments of this material do not require shipping papers or placarding.

This product contains no organic material and is non-acidic. This product requires no waterfront unloading permit per 49 CFR 176.416 (b)(5).

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:	Decomposes @ 410°F	(% BY VOLUME)	N/A	N/A

MSDS Version Number: 7 (revisions to Section 2)

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Reviewed by: The Department of Regulatory Affairs
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