

Material Safety Data Sheet
J. R. Simplot Company
AgriBusiness

Trade Name: RAPTURE™ 4-0-4
Registration No: None

M77619

SECTION 1

CHEMICAL PRODUCT AND COMPANY INFORMATION

Manufacturer or Formulator:	J.R. Simplot Company PO Box 70013 Boise, Idaho 83707	Product Name:	RAPTURE™ 4-0-4
		Common Name:	RAPTURE™ 4-0-4
		Chemical Type:	Inorganic Salts
Emergency Phone - Chemtrec:	1-800-424-9300		

SECTION 2

COMPOSITION INFORMATION

Chemical Name and Synonyms	C.A.S. No.	Chemical Formula	WT% Hazardous	TLV	PEL
NONE					
This product is a blend of the following non-hazardous ingredients			Non Hazardous 100%		
N-(n-butyl) thiophosphoric triamide	94317-64-3	C ₄ H ₁₄ N ₃ PS			
Urea	57-13-6	CO(NH ₂) ₂		15 mg C(CH ₂)/m ³	
Dicyandiamide	461-58-5	not listed			
Potassium Nitrate	7757-79-1	KNO ₃			
Copper Sulfate	7758-99-8	CuSO ₄ · 5H ₂ O		1 mg Cu/m ³	
Ferrous Sulfate Monohydrate	7720-78-7	FeSO ₄		1 mg Fe/m ³	
Magnesium Sulfate	7487-88-9	MgSO ₄		10 mg Mg/m ³	
Manganese Sulfate	10034-96-5	MnSO ₄		5 mg Mn/m ³	
Zinc Sulfate	7733-02-0	ZnSO ₄ · H ₂ O			
Citric Acid Monohydrate	5949-29-1			15 mg/m ³	
Sodium EDTA	64-02-8				

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: Prolonged contact may cause aggravation of respiratory tract.

Eye Contact: Prolonged contact may cause aggravation of eyes.

Skin Absorption: Not normally absorbed through the skin.

Skin Contact: Prolonged contact may cause abrasion to skin

Effects of Overdose: Ingestion of large amounts may cause dizziness, abdominal cramps, vomiting, and diarrhea, discomfort to skin and eyes. CHRONIC EXPOSURE can cause damage to respiratory system, urinary system, blood system, and reproductive system.

SECTION 4

FIRST AID MEASURES

Ingestion: Seek medical attention immediately.

Inhalation: Remove to fresh air. Seek medical attention if discomfort continues.

Eyes: Flush with water for 15 minutes. Seek medical attention if irritation 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: Non-flammable material. Use media suitable to extinguish source of fire.

Special Fire Fighting Procedures: Wear self-contained breathing apparatus approved by NIOSH. Do not wash material into any streams, waterways, drainage ditches or storm sewers, etc. Impound liquids used in firefighting to prevent entry into streams, ditches, sewers, etc.

Unusual Fire and Explosion Hazards: Oxides of nitrogen can be released under intense heat. This product contains an oxidizer and may increase the intensity of a fire.

SECTION 6

ACCIDENTAL RELEASE MEASURES

Environmental Precautions: Slightly toxic to aquatic life. Do not contaminate any watercourse or body of water by direct application, cleaning of equipment or disposal.

Steps to be taken in case material is released or spilled: Contain spill. Follow OSHA regulations for respirator use (See 29 CFR 1910.134). Shovel or sweep up and reuse. Use approved liquid spray to reduce dust when sweeping or shoveling.

SECTION 7

HANDLING AND STORAGE

Precautions to be taken in handling and storing: Prevent spillage and avoid contact with eyes and skin. Follow OSHA regulations for respirator use (See 29 CFR 1910.134.) Use approved liquid spray to reduce dust when sweeping or shoveling. Keep out of the reach of children

SECTION 8

EXPOSURE CONTROLS/PERSONAL PROTECTION

Ventilation Protection: Adequate to remove dust from the air

Respiratory Protection: Approved respirator per 29 CFR 1910.134

Protective Clothing: Normal clean work clothing - shirt with long sleeves and long pants.

Eye Protection: Goggles

Other: Heavy duty work gloves

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SECTION 9

PHYSICAL AND CHEMICAL PROPERTIES

Boiling Point:	Not available	Solubility in Water:	Complete
Specific Gravity:	Not available	% Volatiles (by volume):	Not applicable
Flashpoint:	Non-flammable	Vapor Pressure, mm Hg:	Not available
pH:	Not available	Reaction with Water:	None
Appearance:	Brown Powder	Extinguishing Media:	Use media suitable to extinguish source of fire.

SECTION 10

STABILITY AND REACTIVITY

Stability (Normal Conditions): Stable
Conditions to Avoid: Avoid contact with oxidizable materials
Incompatibility (Material to Avoid): None
Hazardous Decomposition Products: None
Hazardous Polymerization: Will not occur

SECTION 11

TOXICOLOGY

	Oral LD50 (rat)	Dermal LD50 (rat)	Aquatic Fish 96	Aquatic (other)
N-(n-butyl) thiophosphoric triamide	14,300 mg/kg	None listed	None listed	None listed
Urea	14,300 mg/kg	none listed	> 9,100 mg/L	> 10,000 mg/L (daphnia)
Potassium Nitrate	1,900-3,750 mg/kg (rabbit)	> 5,000 mg/kg	1,378-3,000 mg/L	none listed
Copper Sulfate	472 mg/kg	none listed	< 1 mg/L	0.1 mg/L (rainbow trout)
Ferrous Sulfate	319 mg/kg	none listed	none listed	none listed
Manganese Sulfate	2150 mg/kg	none listed	none listed	none listed
Citric Acid	3000 mg/kg	none listed	none listed	none listed
Zinc Oxysulfate	1710 mg/kg		4.6 ppm (rainbow trout/LC 50/fresh water)	0.3 mg/l as Zn/120 hr/stickleback/lethal

All toxicity data from TFI Product Testing Results.

ECOLOGICAL INFORMATION

None Listed.

SECTION 13

DISPOSAL CONSIDERATIONS

Waste Disposal Procedures: Disposal of material should be in accordance with applicable local, state and federal environmental regulatory requirements.

SECTION 14

TRANSPORT INFORMATION

Shipping name:	Not regulated by DOT	C.A.S. Number:	
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)
This product contains copper, manganese and zinc compounds which may be subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 and of 40 CFR 372.45.

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: 2 (revisions to section 1 and MSDS number)

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