

**Material Safety Data Sheet**  
**J. R. Simplot Company**  
**AgriBusiness**

**Trade Name:** Turf Fertilizer with 0.86% Mach 2® 13-03-09  
**Registration No:** None

**M764451**

**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:** Turf Fertilizer with 0.86% Mach 2® 13-03-09  
**Common Name:** 13-3-9  
**Chemical Type:** Inorganic Chemical Fertilizer

**SECTION 2**

**COMPOSITION INFORMATION**

Chemical Name and Synonyms	C.A.S. No.	Chemical Formula	WT% Hazardous	TLV	PEL
Mach 2®					
Halofenozide	112226-61-6	not listed	0.86		
Inerts			1.04		
			<b>Non-Hazardous</b>		
Blend of the following non-hazardous ingredients:			98.1		Not available
Limestone	1317-65-3	CaCO <sub>3</sub>			
Sulfate of Potash	7778-80-5	K <sub>2</sub> SO <sub>4</sub>		10 mg/m <sup>3</sup> Nuisance Dust	
Umaxx™					
N-(n-butyl)-thiophosphonic triamide	94317-64-3	not listed			
Urea	57-13-6	(NH <sub>2</sub> ) <sub>2</sub> CO			
Organic nitrogen (dicyandiamide)	461-58-5	not listed			
Other trace impurities and solvents	mixture	NA			
Urea	57-13-6	(NH <sub>2</sub> ) <sub>2</sub> CO			
Clay	1302-78-9	not listed			
Diammonium Phosphate	7783-28-0	(NH <sub>4</sub> ) <sub>2</sub> HPO <sub>4</sub>		10 mg/m <sup>3</sup> Nuisance Dust	

**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 NH<sub>3</sub>, SO<sub>x</sub>, PO<sub>x</sub> 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.

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**SECTION 9**

**PHYSICAL AND CHEMICAL PROPERTIES**

<b>Boiling Point:</b>	Not applicable	<b>Solubility in Water:</b>	Not available
<b>Density:</b>	Not available	<b>% Volatiles (by volume):</b>	Not applicable
<b>Flashpoint:</b>	Non-flammable	<b>Vapor Pressure, mm Hg:</b>	Not applicable
<b>pH:</b>	Not listed	<b>Reaction with Water:</b>	None
<b>Appearance:</b>	Multi-colored granules.		
<b>Extinguishing Media:</b>	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 NH<sub>3</sub>, SO<sub>x</sub>, PO<sub>x</sub> 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>
<b>Diammonium Phosphate</b>	> 2,000 mg/kg	> 5,000 mg/kg	> 31-1,506.3 mg/L	stimulation at 6.41 mg/L (algae)
<b>Potassium Sulfate</b>	6,600 mg/kg	none listed	680-3,550 mg/L	720-890 mg/L (daphnia)
<b>Urea</b>	14,300 mg/kg	none listed	> 9,100 mg/L	> 10,000 mg/L (daphnia)
<b>Mach 2®</b>	2,850 mg/kg	> 2,000 mg/kg	> 2.7 mg/L	none listed

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 practices and soil management.

**SECTION 14**

**TRANSPORT INFORMATION**

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

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

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MSDS Version Number: 1

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