

# WINFIELD SOLUTIONS, LLC

## Material Safety Data Sheet

FOR EMERGENCY, SPILL, LEAK, FIRE, EXPOSURE, OR ACCIDENT, CALL:  
CHEMTREC 1-800-424-9300

### Section 1 – Chemical Product and Company Identification

Product Name: **RSA Green Flush**

Common Name: Liquid Fertilizer Solution

Chemical Description: Liquid Fertilizer Solution

Manufacturer's Name:

**WINFIELD SOLUTIONS, LLC**

PO Box 64589

St. Paul, MN 55164-0589

Revision Date: 11-19-05

Emergency Telephone Number:

**CHEMTREC 1-800-424-9300**

Replaces: 02-13-08

### Section 2 – Composition Information on Ingredients

Derived from: urea, ferrous sulfate, manganese sulfate, and zinc sulfate

Ingredient	%	TLV or PEL
Nitrogen (N)	2.00	N/A
Sulfur (S) Combined	4.00	N/A
Iron (Fe)	1.00	N/A
Manganese (Mn)	2.00	N/A
Zinc (Zn)	4.00	N/A
Proprietary Ingredients	3 -7	N/A
Water	balance	

### NFPA HAZARD RATING:

0	Least		
1	Slight	1	Health
2	Moderate	0	Flammability
3	High	0	Instability
4	Severe		

### Section 3 – Hazards Identification

**Emergency Overview:** See health effects below.

**CAUTION: Keep out of reach of children.**

**Route(s) of Entry:** Eyes, Inhalation, Skin and Ingestion

**Health Hazards (*Acute and Chronic*):**

**Inhalation:** Inhalation of mist may cause irritation of the upper respiratory tract.

**Eyes:** Irritation of eyes.

**Skin:** Contact may cause irritation. Prolonged or repeated exposure may lead to reddening of skin, rash, dermatitis or other skin reactions.

**Ingestion:** Harmful if swallowed.

**Carcinogenicity**

NTP: Not Listed

IARC: Not Listed

OSHA: Not Listed

**Medical Conditions Generally Aggravated by Exposure:**

None known. Preexisting respiratory conditions may be aggravated by exposure to dusts.

### Section 4 – First Aid Measures

**Inhalation:** Remove person to fresh air and support breathing as needed. Seek medical attention if irritation persists.

**Ingestion:** Seek medical attention or call a poison control center immediately.

**Eyes:** Flush with clean water for at least 15 minutes. Lift eyelids to facilitate irrigation. Seek medical attention if eye irritation persists.

**Skin:** Remove contaminated clothing and wash before re-using. Flush skin with water, and then wash with soap and water. Seek medical attention if skin becomes irritated.

***After first aid, get appropriate in-plant, paramedic, or community medical support.***

## **Section 5 – Fire and Explosion Hazard Data**

<b>Flash Point:</b> Non-combustible	<b>Flammable Limits:</b> Non-combustible	<b>LEL:</b> Not Established	<b>UEL:</b> Not Established
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**Extinguishing Media:** Materials suitable to surrounding fire.

**Special Fire Fighting Procedures:** Wear self-contained breathing apparatus and full bunker gear. Smoke and fumes from fire may contain hazardous components.

**Hazardous Combustion Products:** Toxic gases may be formed in a fire situation, carbon monoxide and other asphyxiates may form as well.

**Unusual Fire and Explosion Hazards:** Closed containers may explode from vapor expansion in high heat. Contain run off by diking to prevent contamination to water supplies.

## **Section 6 – Accidental Release Measures**

**Small Spills:** Clean up personnel should protect against mist inhalation and skin contact. Avoid generating mists. Spills when handling should be cleaned up immediately to prevent spreading.

**Large Spills:** Clean up personnel should protect against mist inhalation and skin contact. Avoid generating mist.

**Containment:** Do not release into sewers or waterways. Dike spills to prevent contamination to water supplies. Contained spills, absorb liquids by covering with clay or other absorbent material, vacuum, scoop or sweep up waste and place in a container for disposal.

## **Section 7 – Precautions for Safe Handling and Use**

**Precautions to Be taken in Handling and Storing:** Store in cool, dry areas away from children, feed and food products and sources of heat. Immediately clean up spills that occur during handling or storage. Protect from freezing keep containers closed when not in use. Do not store in aluminum or metal vessels.

**Other Precautions:** Consult local, State and Federal regulations pertaining to storage and disposal.

## **Section 8 – Control Measures / Personal Protection**

**Respiratory Protection (*Specify Type*):** Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear an MSHA/NIOSH-approved respirator.

**Ventilation:** **Local Exhaust:** Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs. Local exhaust ventilation is preferred.

**Protective Gloves:** Wear chemically protective gloves

**Eye Protection:** Wear protective eyeglasses or chemical safety goggles. Contact lenses are not eye protective devices.

**Other Protective Clothing or Equipment:** Wear chemically protective boots, aprons and gauntlets to prevent prolonged or repeated skin contact.

**Work / Hygienic Practices:** Never eat, drink or smoke in work areas. Practice good hygiene after using this material, especially before eating, drinking, smoking, using the toilet or applying cosmetics.

## **Section 9 – Physical / Chemical Characteristics**

<b>Physical State:</b>	Liquid	<b>Specific Gravity (H<sub>2</sub>O=1)</b>	1.26 (10.50 lbs gal.).
<b>Vapor Pressure (mm Hg.)</b>	N/A	<b>Freezing Point</b>	32F
<b>Vapor Density (AIR=1)</b>	N/A	<b>Boiling Point</b>	212F
<b>Solubility in Water:</b>	100%	<b>pH (5% solution)</b>	2.5
<b>Appearance and Odor</b>	Light brown liquid, with charred wood odor.		

### **Section 10 – Reactivity Data**

**Stability:** Product stable at room temperature in closed containers under normal storage and handling conditions.

**Chemical Incompatibilities:** Strong bases and Acids

**Conditions to avoid:** Avoid excessive heat.

**Hazardous Decomposition Products:** Toxic gases may be formed in a fire situation, carbon monoxide and other asphyxiates may form as well.

**Hazardous Polymerization:** Cannot occur.

### **Section 11 – Toxicological Information**

**Eye Effects:** Irritation

**Chronic Effects:** No unusual chronic effects

**Skin Effects:** May cause irritation

**Carcinogenicity:** Not listed as carcinogenic

**Acute Inhalation Effects:** Not Determined

**Mutagenicity:** Not listed as mutagenic

**Acute Oral Effects:** Not Determined

**Teratogenicity:** Unknown

### **Section 12 – Ecological Information**

**Soil Absorption / Mobility:** Mobile in soil profile

### **Section 13 – Disposal Considerations**

**Disposal:** Dispose of in an approved landfill or apply at recommended label rates.

**Disposal Regulatory Requirement:** Follow applicable Federal, State and local regulations.

### **Section 14 – Transport Information**

Not regulated by the DOT.

### **Section 15 – Regulatory Information**

**SARA TITLE II HAZARD CATEGORY:**

Immediate: **Yes**

Delayed: **No**

Sudden Release of Pressure: **No**

Fire: **No**

Reactive: **No**

**CERCLA:** RQ Zinc Sulfate 1000 pounds, triggered by 14,300 pounds of product.

**SARA, TITLE III, SECTION 313:** This product contains the following toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40CFRR 372); manganese Compounds 6.00, Zinc Compounds 12 percentage by weight.

**PROPOSITION 65: WARNING:** This product may contain chemicals known to the State of California to cause cancer and birth defects or reproductive harm.

### **Section 16 – Other**

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