



# MATERIAL SAFETY DATA SHEET

ROLF C. HAGEN INC., 20500 TRANSCANDA HWY,  
BAIE D'URFÉ, QUEBEC, H9X 0A2  
CANADA

<b>Laguna</b>
Fertilizer Pond Spikes
PT909 PT910 PT911

Page 1 of 4

Section I. Product and Company Identification	
Product name	Laguna Fertilizer Pond Spikes
CAS #	Mixture
Use	Control Release Fertilizer Products
Supplier	Rolf C. Hagen Inc., 20 500 Trans Canada Hwy, Baie d'Urfé, H9X 0A2
Emergency	Call your local poison control center

Section II. Hazards Identification	
WHMIS	Classification
Not Controlled	Not Controlled

Section III. Composition and Information on Ingredients			
Ingredients	Conc. (%)	CAS #	EC #
Magnesium Oxide	N.D.	1309-48-4	215-171-9
Copper Sulfate	N.D.	7758-98-7	231-847-6
Iron Sulfate Heptahydrate	N.D.	7782-63-0	231-753-5
Manganese Sulfate	N.D.	7785-87-7	232-089-9
Sodium Molybdate	N.D.	7631-95-0	231-551-7

Section IV. First Aid Measures	
Eye contact	Immediately flush with copious quantities of water. If victim wear contact lenses, remove them and continue rinsing for at least 15 minutes holding lids apart to ensure flushing of the entire surface. If symptoms develop, seek medical attention.
Skin contact	In case of contact, immediately flush skin with plenty of water. Remove the contaminated clothes and flush with plenty of water for 15 minutes. If symptoms develop, seek medical attention.
Inhalation	Remove victim to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If symptoms develop, seek medical attention.
Ingestion	Rinse mouth with water. Never give anything by mouth if the victim is unconscious or convulsing. Do not induce vomiting unless instructed to do so by a physician or other competent medical personnel. Seek medical attention.

Section V. Fire Fighting Measures	
Suitable extinguishing media	
Use extinguishing media appropriate to surrounding fire conditions.	
Specific hazards arising from the chemical	
High concentration of airborne dust has potential for explosion. Thermal decomposition may produce ammonia as well as oxides of carbon, nitrogen and other metal oxides.	



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Page 2 of 4

<b>Special protective actions for fire-fighters</b>
Wear adequate personal protection to prevent contact with material or its combustion products including a self-contained breathing apparatus operated in a pressure demand or other positive pressure mode.

<b>Section VI. Accidental Release Measures</b>	
Person-related safety precautions	Wear adequate personal protective equipment and clothing (e.g. chemical splash goggles, gloves, apron, rubber boots). Avoid direct contact with eyes. Ensure adequate ventilation.
Measures for environmental protection	Prevent entry into drains, waterways or sewers.
Measures for cleaning/collecting	Sweep up spills. Wear adequate personal protective equipment.

<b>Section VII. Handling and Storage</b>	
Handle in accordance with good industrial hygiene and safety practices. Avoid contact with eyes, skin and clothing. After handling and before eating, drinking or smoking, wash hands and face thoroughly with soap and water. Keep container dry. Do not breathe dust. Store in a cool, well-ventilated place away from incompatible materials. Keep containers tightly closed and avoid container breakage. Store in original container. Do not reuse container. Do not store in an unidentified container.	

<b>Section VIII. Exposure Controls and Personal Protection</b>	
Protective clothing	Apply the appropriate protective measures for safe handling of chemicals. Rubber or plastic gloves. Chemical splash goggles and face mask. Full protective clothing, Rubber boots, vapour respirator.
Engineering controls	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of dusts below their respective threshold limit value.

<b>Section IX. Physical and Chemical Properties</b>	
Appearance (physical state, color, etc.) / Odour	Grey Granular product
Odour threshold	Data not available
pH	Data not available
Melting point / Freezing point	Data not available
Initial boiling point and boiling range	Data not available
Flash point	Data not available
Evaporation rate	Data not available
Flammability (solid, gas)	Data not available
Upper / Lower flammability or explosive limits	Data not available

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Vapour pressure	Data not available
Vapour density	Data not available
Liquid density	Data not available
% Volatile	Data not available
Specific gravity	Data not available
Solubility	Data not available
Coefficient of Water/Oil distribution	Data not available
Auto-ignition temperature	Data not available
Decomposition temperature	Data not available

<b>Section X. Stability and Reactivity</b>	
Instability conditions	Stable under recommended storage conditions.
Conditions to avoid	Data not available
Materials to avoid	Data not available
Hazardous decomposition products	Thermal decomposition ammonia and oxides of carbon, nitrogen and oxides of metals.
Hazardous polymerization	No risk of dangerous polymerization.

<b>Section XI. Toxicological Information</b>	
<b>Route of exposure</b>	<b>Conclusion / Remarks</b>
<b>Skin</b>	May cause skin irritation and sensitization.
<b>Eye</b>	May cause eye irritation.
<b>Inhalation</b>	Prolonged or excessive inhalation of dusts may cause respiratory tract irritation. May aggravate asthma.
<b>Ingestion</b>	Possible nausea, vomiting and diarrhoea
<b>Mutagenicity</b>	Not available
<b>Carcinogenicity</b>	Not available
<b>Reproductive toxicity</b>	Not available
<b>STOT-single exposure</b>	Not available
<b>STOT-repeated exposure</b>	Not available
<b>Aspiration hazard</b>	Not available
<b>Acute toxicity</b>	See above.
<b>Chronic Overexposure</b>	May cause damage to the central nervous system and / or affect lungs, liver or kidney

<b>Section XII. Ecological Information</b>	
Ecotoxicity	Not available
Mobility	Not available
Persistence and Degradability	Not available



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Page 4 of 4

Bioaccumulation potential	Not available
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<b>Section XIII. Disposal Considerations</b>	
Disposal recommendations	Dispose of in accordance with federal, provincial and local regulations. Whenever possible, prevent or minimize the amount of waste generated.
Disposal of damaged packaging	If the container contains residue of a hazardous product, follow all MSDS and label precautions even after container is emptied.
Regulatory disposal information	Data not available

<b>Section XIV. Transport Information</b>	
T.D.G. Classification	Not classified

<b>Section XV. Regulatory Information</b>	
Magnesium Oxide CAS 1309-48-4 TWA 10mg/m <sup>3</sup> ACGIH (TLV)	
Copper Sulfate CAS 7758-98-7 TWA 1mg/m <sup>3</sup> ACGIH (TLV)	
Iron Sulfate Heptahydrate CAS 7782-63-0 TWA 1mg/m <sup>3</sup> ACGIH (TLV)	
Manganese Sulfate CAS 7785-87-7 TWA 5mg/m <sup>3</sup> ACGIH (TLV)	
Sodium Molybdate CAS 7631-95-0 TWA 5mg/m <sup>3</sup> ACGIH (TLV)	

<b>Section XVI. Other information</b>	
KEEP OUT OF REACH OF CHILDREN NITRATE CONTAINING SUBSTANCES, SUCH AS THIS PRODUCT, ARE POTENTIAL ALLERGEN,	
While the company believes the data set forth herein are accurate as the date hereof, the company makes no warranty with respect thereto and expressly disclaims all liability for reliance thereon. Such data are offered solely for your consideration and verification.	

Prepared by Rolf C. Hagen Inc. (514) 457-0914	Validated: April 13 <sup>th</sup> , 2015
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