



SAFETY DATA SHEET

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

Fluval
Plant Grow
A8359, A8360

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Section 1. Product and company Information	
Product Name	Fluval Plant Grow
Product Code	A8359, A8360
Recommended Use and restrictions on Use	Aquarium plant fertilizer.
Supplier	Rolf C. Hagen Inc., 20 500 Trans Canada Hwy, Baie d'Urfé, H9X 0A2
Emergency Telephone Number	Call your local poison control center

Section 2. Hazard Identification	
Classification	Skin Irritant (Category 3)
GHS Label Elements	Hazard Pictograms None Signal Word Warning Hazard Statements Cause mild skin irritation Precautionary Statement(s) If skin irritation occurs: Get medical advice/ attention
Other Hazards	Not classified, No Hazard

Section 3. Composition and Information on Ingredients			
Chemical Name	CAS #	Concentration (%)	EC #
Acetic acid	64-19-7	0.1-1.0	200-580-7
Notes	Concentrations are expressed in % weight/weight.		

Section 4. First-Aid Measures	
Inhalation	Supply fresh air. Rinse mouth and nose with water. If symptoms develop seek medical attention.
Skin Contact	May cause mild skin irritation, flush with plenty of water and soap. If symptoms develop seek medical attention.
Eye Contact	Immediately flush with copious quantities of water for at least 15 minutes holding lids apart to ensure flushing of the entire surface. Remove contact lenses if present. If symptoms develop seek medical attention.
Ingestion	Do NOT induce vomiting. Rinse mouth with water. Have conscious person drink several glasses of water. Never give anything by mouth if the victim is unconscious or convulsing. If vomiting occurs spontaneously, keep victim's head

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	lowered (forward) to reduce risk of aspiration. Seek medical attention.
Most Important Symptoms and Effects, Acute and Delayed	<p>If inhaled: No data available.</p> <p>If on skin: Estimated to be a mild skin irritant.</p> <p>If in eyes: No data available</p> <p>If swallowed: No data available.</p>
Immediate Medical Attention and Special Treatment	<p>Special Instructions: For any symptoms, consult with physician.</p> <p>Notes to physician: No data available.</p> <p>Specific treatments: No data available.</p> <p>Protection of first aiders: No action shall be taken involving any personal risk or without suitable training. Direct contact with the product should be prevented or minimized. Wear gloves in a suitable material such as PVC, Neoprene or Natural Rubber.</p>

Section 5. Fire-Fighting Measures	
Suitable Extinguishing Media	Use extinguishing measures that are appropriated to local circumstances and to the surrounding environment.
Unsuitable Extinguishing Media	No data available.
Specific Hazards Arising from the Product	No data available.
Special Protective Equipment and Precautions for Fire-Fighters	Wear self-contained breathing apparatus for firefighting if necessary.

Section 6. Accidental Release Measures	
Personal Precautions, Protective Equipment, and Emergency Procedures	<p>Recommended:</p> <p>Safety glasses</p> <p>Rubber gloves and other protective clothing, to protect skin.</p>
Environmental Precautions	Do not let product enter drains.
Methods for Containment and Cleaning Up	Recycle if possible; if not, dike and absorb spill with inert materials such as clays, sand, earth, or other commercially available dry sweeping compound. Must be disposed of in accordance with local and national regulation.

Section 7. Handling and Storage	
Precautions for Safe Handling	The workplace and work methods shall be organized in such a way that direct contact with the product is prevented or minimized. Use protective equipment, see section IV. Please observe the instructions regarding permeability and

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	breakthrough time which are provided by supplier of the gloves. Also, consider the specific local conditions under which the product is used such as the danger of cuts, abrasion and the contact time. Material should be transferred in ways that do not create mists or aerosols. Wash hands after handling.
Conditions for Safe Storage	Store at temperatures > 0 °C < 60 °C. Keep containers closed when not in use.

Section 8. Exposure Controls and Personal Protection						
Control Parameters						
Chemical Name	ACGIH® TLV®		OSHA PEL		AIHA® WEEL™	
	TWA	STEL	TWA	STEL	8-hr TWA	Short-term TWA [C]
Acetic acid	10 ppm	15 ppm	10 ppm 25 mg/m3	15 ppm 37 mg/m3	Not available	40 ppm
Notes	Consult local authorities for provincial or state exposure limits.					
Appropriate Engineering Controls	General ventilation is recommended.					
Individual Protection Measures	Eye/Face Protection: Tightly fitted safety glasses. Skin Protection: Rubber gloves and protective clothing. Respiratory Protection: Dust mask. In the absence of local exhaust ventilation approved respirator are recommended.					

Section 9. Physical and Chemical Properties	
Appearance, Physical State and Colour	Liquid, opaque, red
Odour	Vinegar-like
Odour Threshold	No information available
pH	4.0-5.0
Melting Point and Freezing Point	Data not available
Initial Boiling Point and Boiling Range	Data not available
Flash Point	Data not available
Evaporation Rate	No information available
Flammability (solid, gas)	No information available
Upper and Lower Flammability or Explosive Limit	No information available
Vapour Pressure	No information available
Vapour Density (air = 1)	No information available
Relative Density (water = 1)	1.032 – 1.037
Solubility in Water	Soluble in water
Solubility in Other Liquids	No information available
Partition Coefficient, n-Octanol / Water	No information available
Auto-Ignition Temperature	No information available

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Decomposition Temperature	No information available
Viscosity	Less than 2.5 cP

Section 10. Stability and Reactivity	
Reactivity	Product does not polymerize
Chemical Stability	Stable under recommended storage conditions.
Possibility of Hazardous Reactions	None.
Conditions to Avoid	None.
Incompatible Materials	None.
Hazardous Decomposition Products	None.

Section 11. Toxicological Information	
Likely Routes of Exposure	Skin contact.
Acute Toxicity	
LC50	No data found for this product.
LD50 (oral)	No data found for this product. Acetic Acid CAS 64-19-7 LC ₅₀ rat: 4,653 ppm (4H) LC ₅₀ mouse: 2,813 ppm (4H)
LD50 (dermal)	No data found for this product.
TWA	No data found for this product.
Skin Corrosion / Irritation	Estimated to be a mild skin irritant (Category 3)
Serious Eye Damage / Irritation	Not estimated to cause eye damage or irritation
STOT (Specific Target Organ Toxicity) - Single Exposure	Not estimated to cause specific organ toxicity – single exposure
Aspiration Hazard	No data found for this product.
STOT (Specific Target Organ Toxicity) - Repeated Exposure	Not estimated to cause specific organ toxicity – repeated exposure
Respiratory and/or Skin Sensitization	Not estimated to cause respiratory or skin sensitization.
Other	To the best of our knowledge, the chemical physical and toxicological properties

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	have not been thoroughly investigated.
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Carcinogenicity

Chemical Name	IARC	ACGIH®	OSHA	NTP
Acetic Acid	No data found for this product.	No data found for this product.	No data found for this product.	No data found for this product.

Reproductive Toxicity

Development of Offspring	Not established
Sexual Function and Fertility	Not established
Effects on or via Lactation	Not established
Germ Cell Mutagenicity	Not established
Interactive Effects	Not established

Section 12. Ecological Information

Ecotoxicity	No data found for this product.
Persistence and Degradability	No data found for this product.
Bioaccumulative Potential	No data found for this product.
Mobility in Soil	No data found for this product.
Other Adverse Effects	No data found for this product.

Section 13. Disposal Considerations

Disposal Recommendations	Absorb in inert absorbent and send for disposal. Dispose of in accordance with federal, provincial and local regulations.
Disposal of damaged packaging	Follow all SDS and label precautions even after container is emptied.

Section 14. Transport Information

Regulation	UN No.	Proper Shipping Name	Transport Hazard Class(es)	Packing Group
Canada TDG	Not applicable (PIN and PG)	Not regulated	Not regulated	Not regulated
US DOT	Not applicable (PIN and PG)	Not regulated	Not regulated	Not regulated
IATA	Not applicable (PIN and PG)	Not regulated	Not regulated	Not regulated
IMDG	Not applicable	Not regulated	Not regulated	Not regulated

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	(PIN and PG)		
Special Precautions	None		

Section 15. Regulatory Information	
Safety, Health and Environmental Regulations	Canada
	Domestic Substances List (DSL) / Non-Domestic Substances List (NDSL) All ingredients are listed on the DSL list.
	USA
	Toxic Substances Control Act (TSCA) Section 8(b) All ingredients are listed
	California Proposition 65: This product does not contain any chemical known to State of California to cause cancer, birth defects, or any other reproductive harm.

Section 16. Other information																	
HMIS RATINGS Not available	NFPA RATINGS Not available																
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Key to abbreviations

ACGIH® = American Conference of Governmental Industrial Hygienists. **TLV®** = Threshold Limit Value. **TWA** = Time-Weighted Average. **STEL** = Short-term Exposure Limit. **OSHA** = US Occupation Safety and Health Administration. **PEL** = Permissible Exposure Limits. **AIHA®** = AIHA Guideline Foundation. **WEEL™** = Workplace Environmental Exposure Limit. **IARC** = International Agency for Research on Cancer. **NTP** = National Toxicology Program.

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.