



MATERIAL SAFETY DATA SHEET

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

Fluval
Bio Enhancer
A8346 A8348 A8350 A8351 A8352 A8372

Section I. Product and Company Identification	
Product name	Fluval Bio Enhancer
CAS #	Mixture
Use	Remove ammonia from fresh or salt water.
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 applicable

Section III. Composition and Information on Ingredients			
Ingredients	Conc. (%)	CAS #	EC #
Proprietary mixture	Not applicable	Not applicable	Not applicable

Section IV. First Aid Measures	
Eye contact	Flush eyes with copious quantities of water holding lids apart to ensure flushing of the entire surface for at least 15 minutes. Seek medical attention if symptoms develop or persist.
Skin contact	Wash exposed area with plenty of water and soap. Seek medical attention if symptoms develop or persist.
Inhalation	If inhaled remove person to fresh air. Seek medical attention if symptoms persist.
Ingestion	Have conscious person drink several glasses of water. Never give anything by mouth to an unconscious person. Do not induce vomiting, unless directed by medical qualified personnel. Seek medical advice if symptoms develop.

Section V. Fire Fighting Measures	
Suitable extinguishing media	
Use extinguishing media appropriate to surrounding fire conditions.	
Specific hazards arising from the chemical	
Water based product. Not considered to be a fire hazard. Closed container may rupture if exposed to excess heat or flame due to a built-up of internal pressure. Move containers away from fire area if it is safe to do so. Keep containers exposed to fire cool with water spray.	
Special protective actions for fire-fighters	
Wear adequate personal protection to prevent contact with material or its combustion products. Self-contained breathing apparatus with a full-face piece.	

Section VI. Accidental Release Measures



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Person-related safety precautions	Apply the appropriate protective measures for safe handling of chemicals.
Measures for environmental protection	Prevent entry into soil, drains, waterways or sewers.
Measures for cleaning/collecting	Stop a spill if doing so poses no risk. Keep spills contained and soak them up with non-combustible, absorbent materials such as sand, earth, vermiculite or diatomite. Then place them in a container for disposal in accordance with local regulations.

Section VII. Handling and Storage
Handle in accordance with good industrial hygiene and safety practices. After handling and before eating, drinking or smoking, wash hands and face thoroughly with soap and water. Store product in a closed container, in cool, dry, well-ventilated area away from direct sunlight. Store in the original container or in an approved substitute. Keep container closed and in vertical position.

Section VIII. Exposure Controls and Personal Protection

Protective clothing	Apply the appropriate protective measures for safe handling of chemicals. Avoid direct contact with eyes and skin.
Engineering controls	General ventilation

Section IX. Physical and Chemical Properties

Appearance (physical state, color, etc) / Odor	Liquid, amber, bacterial culture odor.
Odor threshold	Data not available
pH	6.50-8.50
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	Data not available
Vapor pressure	Data not available
Vapor density	Data not available
Liquid density	Data not available
% Volatile	Data not available
Specific gravity	1.002-1.006
Solubility	Easily soluble in cold water
Coefficient of Water/Oil distribution	Data not available
Auto-ignition temperature	Data not available

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Decomposition temperature	Data not available
Viscosity	< 2.50 cP

Section X. Stability and Reactivity	
Instability conditions	Stable under recommended storage conditions.
Conditions to avoid	Open flame and heat.
Materials to avoid	None
Hazardous decomposition products	None under recommended storage conditions.
Hazardous polymerization	No risk of dangerous polymerization.

Section XI. Toxicological Information	
Route of exposure	Conclusion / Remarks
Skin	No known significant effects or critical hazards
Eye	May cause irritation
Inhalation	No known significant effects or critical hazards
Ingestion	No known significant effects or critical hazards
Mutagenicity	No known significant effects or critical hazards
Carcinogenicity	No known significant effects or critical hazards
Reproductive toxicity	No known significant effects or critical hazards
STOT-single exposure	Not available
STOT-repeated exposure	Not available
Aspiration hazard	Not available
Acute toxicity	Not available
Chronic Overexposure	Not available

Section XII. Ecological Information	
Ecotoxicity	Non hazardous to aquatic life. All components are readily biodegradable (OCDE 301).
Mobility	Not available
Persistence and Degradability	Not available
Bioaccumulation potential	Not available

Section XIII. Disposal Considerations	
Disposal recommendations	Dispose of in accordance with federal, provincial and local regulations.
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



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Section XIV. Transport Information

T.D.G. Classification	Not applicable
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Section XV. Regulatory Information

Not available

Section XVI. Other information

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.
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