

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

<b>Nutrafin Test Kit</b>
Reagent#2, nitrite
A7827

Section I. Product and Company Identification	
Product name	Reagent#2 for Nutrafin Nitrite test kit
CAS #	Mixture
Use	To measure nitrite in aquarium 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
	E: Corrosive material B-3: Combustible liquid

Section III. Composition and Information on Ingredients			
Ingredients	Conc. (%)	CAS #	EC #
1,2-Propanediol	60-100	57-55-6	200-338-0
Acetic Acid	10-30	64-19-7	200-580-7
N-(1-Naphtyl)-Ethylenediamine Dihydrochloride	1-5	1465-25-4	215-981-2

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 a minimum of 30 minutes holding lids apart to ensure flushing of the entire surface. If irritation persists, repeat flushing. Seek immediate medical attention.
Skin contact	Remove the contaminated clothes and flush with plenty of water and soap for a minimum of 20 minutes. In case of irritation seek medical attention.
Inhalation	Remove victim to fresh air. If symptom persists, obtain medical attention.
Ingestion	Have conscious person drink several glasses of water. Never administrated any liquids to an unconscious or convulsing person. Seek immediate medical attention.

Section V. Fire Fighting Measures
Suitable extinguishing media
Use extinguishing media appropriate to surrounding fire conditions.
Specific hazards arising from the chemical
Combustible liquid. Vapor forms explosive mixture with air. Emits toxic fumes under fire conditions. Contact with oxidizers may cause fire and/or explosion. Vapor may travel considerable distance to sources of ignition and flash back, eliminate all sources of ignition.

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<b>Special protective actions for fire-fighters</b>
Wear adequate personal protection to prevent contact with material or its combustion products. 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).
Measures for environmental protection	Prevent entry into drains, waterways or sewers.
Measures for cleaning/collecting	Use an inert absorbent material such as clay, sand, earth or vermiculite. Place in closed container for disposal. Clean the spill area after product complete removal.

<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. Prevent accidental contact with incompatible chemicals. Store away from incompatible materials in a cool, well-ventilated area. Keep containers closed.	

<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 or face mask. Protective clothing, apron. Rubber boots.
Engineering controls	Use sufficient ventilation system.

<b>Section IX. Physical and Chemical Properties</b>	
Appearance (physical state, color, etc.) / Odor	Liquid, pungent, vinegar like odor
Odor threshold	Data not available
pH	< 1
Melting point / Freezing point	Data not available
Initial boiling point and boiling range	Data not available
Flash point	Acetic Acid, glacial: 39 °C (closed cup)
Evaporation rate	Data not available
Flammability (solid, gas)	Data not available
Upper / Lower flammability or explosive limits	Acetic Acid, glacial <b>LEL:</b> 4% <b>UEL:</b> 19.9%
Vapor pressure	Data not available
Vapor density	Not applicable
Liquid density	Data not available

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% Volatile	> 90
Specific gravity	1 at 20 °C
Solubility	Soluble in water
Coefficient of Water/Oil distribution	Data not available
Auto-ignition temperature	426 °C based on data for Acetic Acid glacial
Decomposition temperature	Data not available
Viscosity	Data not available

<b>Section X. Stability and Reactivity</b>	
Instability conditions	Stable under recommended storage conditions.
Conditions to avoid	Avoid high temperatures, contamination and incompatible materials.
Materials to avoid	Incompatible with reducing agents, organic materials, alkalis and finely powdered metals.
Hazardous decomposition products	Thermal decomposition products are toxic and include hydrogen chloride gas.
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>	Causes severe burns if the exposed area is not washed immediately 1,2-Propanediol LD <sub>50</sub> (rabbit - dermal) acute: 20,800 mg/kg Acetic acid LD <sub>50</sub> (rabbit - dermal) acute: 1,060 mg/kg
<b>Eye</b>	Causes severe burn. Permanent blindness may occur.
<b>Inhalation</b>	If inhaled, may cause nose and throat irritation. Acetic acid LC <sub>50</sub> (rat – vapors) acute: 16,000 ppm (4H); (mouse – vapors) acute: 5,620 ppm (1 H)
<b>Ingestion</b>	Swallowing this material causes severe burns to the mouth, throat and stomach. 1,2-Propanediol LD <sub>50</sub> (rat - oral) acute: 20,000 mg/kg; (rabbit - oral) acute: 18 500 mg/kg Acetic acid LD <sub>50</sub> (rat - oral) acute: 3,310 mg/kg
<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>	Corrosive! Dangerous by ingestion, inhalation or skin absorption.

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<b>Chronic Overexposure</b>	May cause liver and kidney damage. To the best of our knowledge, the chemical, physical, and toxicity data of this product has not been fully investigated.
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<b>Section XII. Ecological Information</b>	
Ecotoxicity	Not available
Mobility	Not available
Persistence and Degradability	Not available
Bioaccumulation potential	Not available

<b>Section XIII. Disposal Considerations</b>	
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

<b>Section XIV. Transport Information</b>	
T.D.G. Classification	UN2790, PG: III, Class 8

<b>Section XV. Regulatory Information</b>	
<b>Exposure Limits</b>	
Hydrochloric Acid (CAS 7647-01-0)	
<b>ACGIH-TLV:</b> 5 ppm (7,5 mg/m <sup>3</sup> ) (Ceiling)	
1,2-Propanediol (CAS 57-55-6)	
<b>AIHA-WEEL:</b> 10 mg/m <sup>3</sup> (aerosol only)	
Acetic Acid (CAS 7647-01-0)	
<b>ACGIH-TWA:</b> 10 ppm (25 mg/m <sup>3</sup> )	
STEL: 15 ppm (37 mg/m <sup>3</sup> )	
N-(1-Naphtyl)-Ethylendiamine Dihydrochloride (CAS 1465-25-4)	
Not established	

<b>Section XVI. Other information</b>	
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.	