



# MATERIAL SAFETY DATA SHEET

## 1. Product and Company Identification

<b>Product name</b>	<b>Fluorescent Gas Leak Detector (4184-01, 4184-08, 4184-24, 4184-53)</b>
<b>CAS #</b>	Mixture
<b>Product Use</b>	Gas Leak Detector
<b>Manufacturer</b>	Nu-Calgon 2008 Altom Court St. Louis, MO 63146 US Phone: 314-469-7000 / 800-554-5499 Emergency Phone: 1-800-424-9300 (CHEMTREC)

## 2. Hazards Identification

<b>Emergency overview</b>	MAY CAUSE EYE AND SKIN IRRITATION.
<b>Potential short term health effects</b>	
<b>Routes of exposure</b>	Eye, Skin contact, Inhalation, Ingestion.
<b>Eyes</b>	May cause irritation.
<b>Skin</b>	May cause irritation.
<b>Inhalation</b>	Prolonged inhalation may be harmful.
<b>Ingestion</b>	May cause stomach distress, nausea or vomiting.
<b>Target organs</b>	Eyes. Skin. Respiratory system.
<b>Chronic effects</b>	Prolonged or repeated exposure can cause drying, defatting and dermatitis.
<b>Signs and symptoms</b>	Symptoms may include redness, oedema, drying, defatting and cracking of the skin. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.
<b>Potential environmental effects</b>	See section 12.

## 3. Composition/Information on Ingredients

<b>Composition comments</b>	None by WHMIS criteria.
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## 4. First Aid Measures

<b>First aid procedures</b>	
<b>Eye contact</b>	Flush with cool water. Remove contact lenses, if applicable, and continue flushing. Obtain medical attention if irritation persists.
<b>Skin contact</b>	Flush with cool water. Wash with soap and water. Obtain medical attention if irritation persists.
<b>Inhalation</b>	Not a normal route of exposure. If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention.
<b>Ingestion</b>	Do not induce vomiting. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Never give anything by mouth if victim is unconscious, or is convulsing. Obtain medical attention.
<b>Notes to physician</b>	Treat symptomatically.

## 5. Fire Fighting Measures

<b>Flammable properties</b>	Not flammable by WHMIS criteria.
<b>Extinguishing media</b>	
<b>Suitable extinguishing media</b>	Alcohol resistant foam. Dry chemical powder. Carbon dioxide (CO <sub>2</sub> ).
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Protection of firefighters</b>	
<b>Specific hazards arising from the chemical</b>	Not available

<b>Protective equipment for firefighters</b>	Not available
<b>Hazardous combustion products</b>	May include and are not limited to: Oxides of carbon. Oxides of nitrogen.
<b>Explosion data</b>	
<b>Sensitivity to mechanical impact</b>	Not available.
<b>Sensitivity to static discharge</b>	Not available.

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## 6. Accidental Release Measures

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<b>Personal precautions</b>	Keep out of low areas. Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. For personal protection, see section 8.
<b>Environmental precautions</b>	Avoid discharge into drains, water courses or onto the ground.
<b>Methods for containment</b>	Use water spray to reduce vapours or divert vapour cloud drift.
<b>Methods for cleaning up</b>	<p>Large Spills: Dike the spilled material, where this is possible. Stop the flow of material, if this is without risk. Cover with plastic sheet to prevent spreading. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.</p> <p>Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. For waste disposal, see section 13.</p> <p>Never return spills to original containers for re-use.</p>

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## 7. Handling and Storage

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<b>Handling</b>	Ensure adequate ventilation. Avoid contact with eyes, skin and clothing.
<b>Storage</b>	Keep away from heat, open flames or other sources of ignition. Store away from incompatible materials (see Section 10 of the MSDS).

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## 8. Exposure Controls/Personal Protection

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<b>Exposure limits</b>	Not applicable.
<b>Engineering controls</b>	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.
<b>Personal protective equipment</b>	
<b>Eye/Face protection</b>	Safety goggles or glasses.
<b>Hand protection</b>	Rubber gloves. Confirm with a reputable supplier first.
<b>Skin and body protection</b>	As required by employer code. Wear suitable protective clothing.
<b>Respiratory protection</b>	Not normally required if good ventilation is maintained. Where exposure guideline levels may be exceeded, use an approved NIOSH respirator.
<b>General hygiene considerations</b>	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

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## 9. Physical and Chemical Properties

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<b>Appearance</b>	Clear
<b>Colour</b>	Fluorescent Yellow
<b>Form</b>	Liquid.
<b>Odour</b>	Neutral
<b>Odour threshold</b>	Not available.
<b>Physical state</b>	Liquid.
<b>pH</b>	8.1 - 8.5 (Concentrate)
<b>Freezing point</b>	-9.44 °C (15 °F)
<b>Boiling point</b>	Not available.
<b>Pour point</b>	Not available.

<b>Evaporation rate</b>	Not available
<b>Flash point</b>	Not available.
<b>Auto-ignition temperature</b>	Not available
<b>Flammability Limits in Air, Upper, % by Volume</b>	Not available
<b>Flammability Limits in Air, Lower, % by Volume</b>	Not available
<b>Heat of combustion</b>	Not available.
<b>Vapour pressure</b>	Not available
<b>Vapour density</b>	Not available
<b>Specific gravity</b>	Not available.
<b>Partition coefficient (n-octanol/water)</b>	Not available
<b>Solubility (Water)</b>	Not available.
<b>Relative density</b>	Not available.
<b>Viscosity</b>	325 - 425 cPs
<b>VOC</b>	Not available
<b>Percent volatile</b>	Not available

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## 10. Stability and Reactivity

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<b>Reactivity</b>	This product may react with strong oxidising agents.
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid</b>	Do not mix with other chemicals.
<b>Incompatible materials</b>	Strong oxidising agents.
<b>Hazardous decomposition products</b>	May include and are not limited to: Oxides of carbon. Oxides of nitrogen.

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## 11. Toxicological Information

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<b>Effects of acute exposure</b>	
<b>Eye contact</b>	May cause irritation.
<b>Skin contact</b>	May cause irritation.
<b>Inhalation</b>	Prolonged inhalation may be harmful.
<b>Ingestion</b>	May cause stomach distress, nausea or vomiting.
<b>Sensitisation</b>	Non-hazardous by WHMIS criteria.
<b>Chronic effects</b>	Non-hazardous by WHMIS criteria.
<b>Carcinogenicity</b>	Non-hazardous by WHMIS criteria.
<b>Mutagenicity</b>	Non-hazardous by WHMIS criteria.
<b>Reproductive effects</b>	Non-hazardous by WHMIS criteria.
<b>Teratogenicity</b>	Non-hazardous by WHMIS criteria.
<b>Name of Toxicologically Synergistic Products</b>	Not available.

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## 12. Ecological Information

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<b>Ecotoxicity</b>	Not available.
<b>Persistence and degradability</b>	Not available.
<b>Bioaccumulation/accumulation</b>	Not available
<b>Mobility in environmental media</b>	Not available.
<b>Environmental effects</b>	Not available.
<b>Aquatic toxicity</b>	Not available.
<b>Chemical fate information</b>	Not available.

### 13. Disposal Considerations

<b>Disposal instructions</b>	Review federal, provincial, and local government requirements prior to disposal.
<b>Waste from residues / unused products</b>	Not available
<b>Contaminated packaging</b>	Not available

### 14. Transport Information

#### Transportation of Dangerous Goods (TDG - Canada)

Not regulated as dangerous goods.

### 15. Regulatory Information

**Canadian federal regulations** This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

**WHMIS status** Not Controlled

#### Inventory status

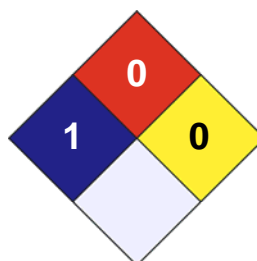
Country(s) or region	Inventory Name	On Inventory (Yes/No)*
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

### 16. Other Information

LEGEND	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

<b>HEALTH</b>	/	1
<b>FLAMMABILITY</b>		0
<b>PHYSICAL HAZARD</b>		0
<b>PERSONAL PROTECTION</b>		X



#### Disclaimer

Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.

**Issue date** 22-September-2014

**Effective date** 15-September-2014

**Expiry Date** 15-September-2017

**Prepared by** Nu-Calgon Technical Service Phone: (314) 469-7000

**Other information** For an updated MSDS, please contact the supplier/manufacturer listed on the first page of the document.  
This MSDS conforms to the ANSI Z400.1/Z129.1-2010 Standard.