



# MSDS

Material Safety Data Sheet  
November 7, 2007

## **Section 01: Chemical Product Identification**

Domestic Trade Name: Lavasol V<sup>TM</sup>  
Export Trade Name: Lavasol V<sup>TM</sup>

## **Section 02: Information on Hazardous Ingredients**

Non Hazardous Regulated Ingredients:		
FDA grade weak organic acids		20-25%
Polyelectrolytes	Trade secret	1%
Water	7732-18-5	72-79%

## **Section 03: Hazards Identification**

### **Acute Toxicity**

Inhalation Toxicity: Exposure to Spray Will Cause Irritation to Mucous Membranes and Respiratory System.  
Skin Irritation: Causes Severe Irritation  
Sensitizer: Not a Sensitizer  
DOT Corrosive: Not Applicable  
Primary Route of Exposure: Skin Contact

**Medical Conditions Aggravated by Exposure:** May aggravate existing respiratory and skin ailments.

## **Section 04: First Aid Measures**

First Aid For Ingestion: Do Not Induce Vomiting. Give Large Quantities of Milk and Water. Never Give Anything by Mouth to an Unconscious Person. Call a Physician Immediately.  
First Aid Inhalation: Remove to Fresh Air.  
First Aid Eye Contact: Immediately Flush Eyes with Plenty of Water For At Least 30 Minutes. Call a Physician Immediately.  
First Aid Skin Contact: Wash After Exposure With Cold Water For At Least 15 Minutes. Use alkaline soap if available.

## **Section 05: Fire Fighting Measures**

Autoignition Temp: N/A  
Flammable Limits: LEL (Lower Explosive Limits) N/A  
Fire Fighting Media: Use Media Appropriate to Primary Cause of Fire  
Special Fire Fighting Procedures: None Known  
Fire/Explosion Hazards: None Known  
NFPA Hazard Codes - Health/Flammability/Reactivity; 1,0,1  
HMIS Hazard Codes - Health/Flammability/Reactivity; 1,0,1

## **Section 06: Accidental Release Measures**

Spill/Leak Clean-Up Procedures: If possible neutralize with alkaline soap.

**Land Spill:** Wearing recommended protective clothing and equipment, dike spill with soil, sand, or compatible commercial absorbent. Remove remaining liquid with a pump, vacuum truck, or absorb liquid in sand or commercial absorbent. Place waste in approved containers for disposal. Dispose waste according to Federal, State, and local regulations.

**Water Spill:** Wear protective clothing and equipment. Stop flow. Dike contaminated water and remove for disposal and/or treatment. Notify proper authorities and all downstream users if possible. Dispose of with Solid Waste according to Federal, State, and Local Regulations.

**\*CAUTION:** Floor will be Slippery

*Personal protection:*

Protective clothing including chemical splash goggles, Latex, nitrile, or butyl rubber full-length gloves, rubber apron made of nitrile or butyl rubber, and rubber overshoes must be worn during spill clean-ups and deactivation of material. If this material comes into contact with the skin during clean-up operations, immediately remove all contaminated clothing and wash exposed skin areas with soap and water. See section 4, First Aid Measures, for further information.

**Section 07: Handling and Storage**

*Precautionary Measures:* Avoid Breathing Spray

Disposal Method: Dispose of with Solid Waste According to Federal, State and Local Regulations  
RCRA Class: Not Regulated

*Storage Conditions:*

The maximum storage temperature for this material is 55°C/131°F. The minimum storage temperature for this material is 0°C/32°F. Store in a well ventilated area. Do not store this material in containers made of steel.

**Section 08: Exposure Control/Personal Protection**

Ventilation: Use local exhaust ventilation at the point of dust or mist evolution

Respiratory Protection: Dust masks where spraying cannot be avoided

Eye Protection: Safety glasses, splash goggles, and/or face shields (ANSI Z87.1 or approved equivalent).

Skin Protection: Use latex, neoprene, or rubber gloves, boots, and apron. Remove gloves after use. Wash hands with soap and water.

Personal Hygiene: Observe ordinary measures of personal hygiene

**Section 09: Physical and Chemical Properties**

Boiling Point: 100 °C

Melting/Freezing Point: Approximately 0 °C

Appearance: Clear Liquid

Density: Approximately 9lbs./gallon

Specific Gravity: 1.0 – 1.2 g/ml

Percentage Volatile: 72-79% Water - Max

Evaporation Rate: Same as Water

pH of Solution: 3 – 4.5

Odor: Pleasant

Vapor Pressure: 17 mm Hg @ 20 degrees C/68 degrees F Water

Vapor Density: <1 Water

Water Solubility: Complete

**Section 10: Stability and Reactivity**

Stability: Stable

Hazardous Polymerization: Will not Occur

Conditions to Avoid: None Known

Incompatible Materials: Strong Oxidizing or Reducing Agents

Hazardous Decomposition Products: Not a Fire or Explosions Hazard; However, in a Fire Situation, This Product Will Emit Toxic Gases and Form Acids.

## **Section 11: Toxicological Information**

### ***Acute Toxicity***

Mutagenicity: No data  
Oral Toxicity: No data  
Dermal Toxicity: Not absorbed topically  
Inhalation Toxicity: None known  
Skin Irritation: No data  
Sensitizer: No data

## **Section 12: Ecological Information**

### ***Environmental Toxicity:***

No environmental data

## **Section 13: Disposal**

Dispose liquid and contaminated solids in accordance with Federal, State, and local regulations and permits.

## **Section 14: Transport Information**

### ***Domestic Data***

Dot Shipping Name: Ammonium hydrogen difluoride, liquid  
Dot Hazard Class: 8  
Hazardous Ingredients: Ammonium hydrogen fluoride

### ***Export Data***

Export Shipping Name: Ammonium hydrogen difluoride, liquid  
Export Hazard Class: 8  
Hazardous Ingredients: Ammonium hydrogen fluoride  
UN Number: UN2817

## **Section 15: Regulatory Information**

### ***SARA Section 313 Notification (40CFR 372)***

This Product Does Not Contain Toxic Chemicals Subject to the Reporting Requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

All components of this product are in compliance with the inventory listing requirements of the U.S. Toxic Substance Control Act (TSCA) Chemical Substance Inventory.

## **Section 16: Other Information**

HMIS Hazard Codes – Health/Flammability/Reactivity; 1,0,1  
NFPA Hazard Codes - Health/Flammability/Reactivity; 1,0,1

**For Chemical Emergency  
Spill Leak Fire Exposure or Accident  
Call CHEMTREC Day or Night**

**DOMESTIC NORTH AMERICA 800-424-9300  
INTERNATIONAL, CALL 703-527-3887 (collect calls accepted)**

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