

## MATERIAL SAFETY DATA SHEET (MSDS)

### 1. Identification

**Product Name:** Lavasol™ 8

**Synonyms:**

**CAS Number:** NA

**Product Use:** Reverse Osmosis Membrane Cleaner

**Manufacturer/Supplier:** Professional Water Technologies

**Address:** 1048 La Mirada Court, Vista California, 92081, USA

**General Information:** 760-639-4400

**Transportation Emergency Number:** CHEMTREC: 800-424-9300 (Domestic North America)  
703-527-3887 (International, collect calls accepted)

### 2. Hazards Identification

#### GHS Classification:

Health	Environmental	Physical
<p><b>Health Hazards:</b> Primary Route of Exposure: Skin contact Inhalation: Exposure to Spray Will Cause Irritation to Mucous Membranes and Respiratory System. Skin Contact: Exposure to skin can cause irritation but immediate first aid not likely required Eye contact: Material can cause irritation to eyes Ingestion: Material is not harmful if accidentally ingested</p> <p><b>Medical Conditions Aggravated by Exposure:</b> None Known <b>TLV:</b> Threshold Limit Value – Make every effort to limit your exposure through good chemical hygiene practices, workplace engineering controls and use of personal protective equipment</p>	<p><b>Acute Toxicity:</b> Oral Toxicity: LD50&gt;4000 mg/kg Dermal Toxicity: LD50&gt;5000 mg/kg in Rabbits Inhalation Toxicity: Exposure to Spray Can Cause Irritation to Mucous Membranes and Respiratory System. Skin Irritation: May Cause Mild Irritation Sensitizer: No Human Repeat Insult Patch Test; Not a Sensitizer DOT Corrosive: Not Applicable Primary Route of Exposure: Contact</p>	<p>Boiling Point: 212 °C Melting/Freezing Point: NE Appearance: Clear – Straw colored liquid Specific Gravity: 1.25 g/ml Evaporation Rate: NE pH of Solution: 10.5 – 12 Odor: Hypochlorite odor Vapor Pressure: NE Vapor Density: NE Water Solubility: Complete</p>

**GHS Label:**

**Symbols:**



**Hazard Statements**

Causes mild skin irritation and eye damage.  
May cause allergic skin reaction.

**Precautionary Statements**

Do not eat or drink when using this product. Do not breathe mist/vapors. Keep container tightly closed. Wear respiratory protection, protective gloves and eye/face protection. Use in a well-ventilated area. Store container tightly closed in cool/well-ventilated place. Wash thoroughly after handling.

**3. Composition / Information on Ingredients**

**Component**

Potassium Hydroxide  
Sodium Hypochlorite

**CAS Number**

# 1310-58-3  
# 7681-52-9

**4. First Aid Measures**

**Eye:** Eye irritation. Flush immediately with large amounts of water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Get immediate medical attention.

**Skin:** Itching or irritation of the skin. Immediately flush the skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Use alkaline soap if available. Wash contaminated clothing before reuse.

**Inhalation:** For nasal irritation, remove exposed person from source of exposure to fresh air.

**Ingestion:** Do Not Induce Vomiting. If conscious, give large amounts of water, citrus juice, or 1:1 vinegar/water solution. Call physician and/or Chemtrec immediately.

**5. Fire Fighting Measures**

**Suitable Extinguishing Media:** Use dry chemical, foam, or carbon dioxide to extinguish fire. Water may be ineffective but should be used to cool fire-exposed containers, structures and to protect personnel. Use water to dilute spills and to flush them away from sources of ignition.

**Fire Fighting Procedures:** Use media appropriate to primary cause of fire. Use water spray to cool containers exposed to fire. Minimize exposure. Do not breathe fumes. Contain run-off.

**Unusual Fire and Explosion Hazards:** None known

**Combustion Products:** May present an explosion hazard under dust loading conditions in excess of 25,000 mg/M<sup>3</sup>.

Autoignition Temp: N/A

Flammable Limits: LEL (Lower Explosive Limits) N/A

## 6. Accidental Release Measures

Spill/Leak Clean-Up Procedures:

*Land Spill:*

Absorb bulk spill on inert material and containerize. Neutralize residue with weak acid and flush to drain with plenty of water. Spill may be slippery. Wear all protective equipment.

*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.

## 7. 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

## 8. Exposure Controls / Personal Protection

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

*Respiratory Protection:* A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANZI Z88.2 requirements must be followed when ever workplace conditions warrant a respirator use. Use air purifying respirators within use limitations associated with the equipment or else use supplied air-respirators. If air -purifying respirator use is appropriate, use a respirator with organic/acid gas cartridge and dust/mist prefilters. For emergencies or instances where the exposure levels are not known, use a full- face piece positive-pressure, air supplied respirator. Warning air purifying respirators do not protect workers in oxygen deficient atmospheres.

*Eye Protection:* Splash goggles and/or face shield (ANSI Z87.1 or approved equivalent).

*Skin Protection:* Wear impervious protective clothing. Use butyl gloves, boots, and coveralls. Remove gloves after use. Wash hands with soap and water.

*Personal Hygiene:* Observe ordinary measures of personal hygiene.

## 9. Physical and Chemical Properties

Boiling Point: 212 °C

Melting/Freezing Point: NE

Appearance: Clear – Straw colored liquid

Specific Gravity: 1.25 g/ml

Evaporation Rate: NE

pH of Solution: 10.5 – 12

Odor: Hypochlorite odor

Vapor Pressure: NE

Vapor Density: NE

Water Solubility: Complete

Autoignition Temp: N/A

Flammable Limits: LEL (Lower Explosive Limits) N/A

## 10. Stability and Reactivity

Stability: Stable

Hazardous Polymerization: Will not occur

Conditions to Avoid: None Known

Incompatible Materials: Strong acidic materials, ammonia, urea, oxidizable materials or metals

Hazardous Decomposition Products: Oxides of carbon, phosphorus, and/or chlorine

## 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

## 12. Ecological Information

***Environmental Toxicity:***

No Data

## 13. Disposal Considerations

Dispose of container and unused contents in accordance with Federal, State, and Local requirements.

## 14. Transport Information

***Land Transport - USDOT***

Dot Shipping Name: Corrosive liquid, basic, inorganic, N.O.S.

Dot Hazard Class: 8

Hazardous Ingredients: Potassium Hydroxide

PG III

UN Number: 3266

ERG 154

PWT Product Name: Lavasol™ 8

***Sea Transport - IMDG***

Export Shipping Name: Corrosive liquid, basic, inorganic, N.O.S. (Potassium Hydroxide)

Export Hazard Class: 8

Hazardous Ingredients: Potassium Hydroxide

UN Number: 3266

PG III

ERG 154

PWT Product Name: Lavasol™ 8

***Air Transport - IATA/ICAO***

Export Shipping Name: Corrosive liquid, basic, inorganic, N.O.S. (Potassium Hydroxide)

Export Hazard Class: 8

Hazardous Ingredients: Potassium Hydroxide

UN Number: 3266

PG III

ERG 154

PWT Product Name: Lavasol™ 8

## 15. Regulatory Information

### U.S. Federal Regulations

Comprehensive Environmental Response and Liability Act of 1980 (CERCLA):

No reportable quantity (RQ) for this material. If appropriate, immediately report to the National Response Center (800/424-8802) as required by U.S. Federal Law. Also contact appropriate state and local regulatory agencies.

Toxic Substances Control Act (TSCA): All components of this product are included on the TSCA inventory.

Clean Water Act (CWA): Lavasol™ 8 is not a hazardous substance under the Clean Water Act. Consult Federal, State and local regulations for specific requirements.

Clean Air Act (CAA): Lavasol™ 8 is not a hazardous substance under the Clean Air Act. Consult Federal, State and local regulations for specific requirements.

Superfund Amendments and Reauthorization Act (SARA) Title III 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.

### State Regulations

California: **This product contains the following chemical(s) known to the State of California to cause cancer, birth defects or reproductive harm:**

Component	CAS Number
Potassium Hydroxide	# 1310-58-3
Sodium Hypochlorite	# 7681-52-9

### International Regulations

Canadian Environmental Protection Act: **All of the components of this product are included on the Canadian Domestic Substances list (DSL).**

Canadian Workplace Hazardous Materials Information System (WHMIS):  
**None**

**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.**

**European Inventory of Existing Chemicals (EINECS):** All of the components of this product are included on EINECS.

### **EU Classification:**

#### **EU Risk (R) and Safety (S) Phrases:**

R37/38: Irritating to respiratory system and skin.

R41: Risk of serious damage to eyes.

R43: May cause sensitization by skin contact.

S53: Avoid exposure - obtain special instructions before use.

S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

S9: Keep container in a well-ventilated place.  
S36/37: Wear suitable protective clothing and gloves.  
S57: Use appropriate container to avoid environmental contamination.

## **16. Other Information**

**National Fire Protection Association (NFPA) Ratings:** This information is intended solely for the use of individuals trained in the NFPA system.

**Health: 3**

**Flammability: 0**

**Reactivity: 1**

**Revision Indicator:** New MSDS, May 25, 2012

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