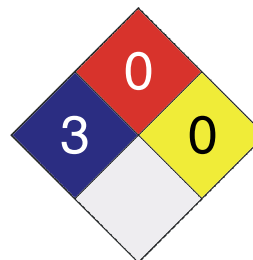


## 1. Product and Company Identification

<b>Product Name</b>	<b>MSDS Example</b>
<b>CAS #</b>	Mixture
<b>Product Use</b>	Cleaner
<b>Manufacturer</b>	Dell Tech Laboratories Ltd. UWO Research Park 100 Collip Circle, Suite 220 London, ON N6G 4X8 CA Phone: 1-519-858-5021 Fax: 1-519-858-5026 Emergency Phone: 1-519-858-5021

LEGEND HMIS/NFPA	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

Health	/ 3
Flammability	0
Physical Hazard	0
Personal Protection	B



## 2. Hazards Identification

<b>Emergency Overview</b>	DANGER -- CORROSIVE May cause chemical burns to eyes and skin.
<b>Potential short term health effects</b>	
<b>Routes of exposure</b>	Eye, Skin contact, Inhalation, Ingestion.
<b>Eyes</b>	May cause chemical burns. May cause blindness.
<b>Skin</b>	May cause chemical burns. Harmful contact may not cause immediate pain.
<b>Inhalation</b>	May cause respiratory tract irritation.
<b>Ingestion</b>	Harmful if swallowed. May cause chemical burns to mouth, throat and stomach.
<b>Target organs</b>	Eyes. Respiratory system. Skin.
<b>Chronic effects</b>	Prolonged or repeated exposure to dilutions can cause drying, defatting and dermatitis.
<b>Signs and symptoms</b>	The product causes burns of eyes, skin and mucous membranes.

## 3. Composition/Information on Ingredients

Ingredient(s)	CAS #	Percent
Alcohols, C12-16, ethoxylated	68551-12-2	1 - 5
Sodium hydroxide	1310-73-2	30 - 60

## 4. First Aid Measures

<b>First aid procedures</b>	
<b>Eye contact</b>	Immediately flush with cool water. Remove contact lenses, if applicable, and continue flushing for 15 minutes. Obtain medical attention immediately.
<b>Skin contact</b>	Immediately flush with water. Wash with soap and water. Obtain medical attention if irritation persists.
<b>Inhalation</b>	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. Obtain medical attention. Never give anything by mouth if victim is unconscious, or is convulsing.

**General advice**

If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Avoid contact with eyes and skin. Keep out of reach of children.

## 5. Fire-fighting Measures

<b>Flammable properties</b>	Not flammable by WHMIS criteria.
<b>Extinguishing media</b>	
<b>Suitable extinguishing media</b>	Treat for surrounding material.
<b>Unsuitable extinguishing media</b>	Not available
<b>Protection of firefighters</b>	
<b>Specific hazards arising from the chemical</b>	Not available
<b>Protective equipment for firefighters</b>	Firefighters should wear full protective clothing including self contained breathing apparatus.
<b>Hazardous combustion products</b>	May include and are not limited to: Oxides of carbon. Oxides of sodium.
<b>Explosion data</b>	
<b>Sensitivity to mechanical impact</b>	Not available
<b>Sensitivity to static discharge</b>	Not available

## 6. Accidental Release Measures

<b>Personal precautions</b>	Keep unnecessary personnel away. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak.
<b>Methods for containment</b>	Stop leak if you can do so without risk. Prevent entry into waterways, sewers, basements or confined areas.
<b>Methods for cleaning up</b>	Before attempting clean up, refer to hazard data given above. Small spills may be absorbed with non-reactive absorbent and placed in suitable, covered, labelled containers. Prevent large spills from entering sewers or waterways. Contact emergency services and supplier for advice. Never return spills in original containers for re-use. Should not be released into the environment.

## 7. Handling and Storage

<b>Handling</b>	Use good industrial hygiene practices in handling this material. Do not get this material in your eyes, on your skin, or on your clothing.
<b>Storage</b>	Keep out of the reach of children. Store in a closed container away from incompatible materials.

## 8. Exposure Controls / Personal Protection

**Exposure limit values**

Ingredient(s)	Exposure limit values
Alcohols, C12-16, ethoxylated	<b>ACGIH-TLV</b> Not established
Sodium hydroxide	<b>ACGIH-TLV</b> Ceiling: 2 mg/m <sup>3</sup>

<b>Engineering controls</b>	General ventilation normally adequate.
<b>Personal protective equipment</b>	
<b>Eye/Face protection</b>	Wear chemical goggles.
<b>Hand protection</b>	Rubber gloves. Confirm with a reputable supplier first.
<b>Skin and body protection</b>	As required by employer code.
<b>Respiratory protection</b>	Where exposure guideline levels may be exceeded, use an approved NIOSH respirator.
<b>General hygiene considerations</b>	Use good industrial hygiene practices in handling this material. When using do not eat or drink. Wash hands before breaks and immediately after handling the product.

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## 9. Physical and Chemical Properties

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<b>Appearance</b>	Clear.
<b>Colour</b>	Colourless
<b>Form</b>	Liquid
<b>Odour</b>	Strong
<b>Odour threshold</b>	Not available
<b>Physical state</b>	Liquid
<b>pH</b>	> 12
<b>Melting point</b>	Not available
<b>Freezing point</b>	Not available
<b>Boiling point</b>	100 °C (212.00 °F)
<b>Pour point</b>	Not available
<b>Flash point</b>	Not available
<b>Evaporation Rate</b>	Not available
<b>Flammability limits in air, lower, % by volume</b>	Not available
<b>Flammability Limits in Air, Upper, % by Volume</b>	Not available
<b>Vapour pressure</b>	Not available
<b>Vapour density</b>	Not available
<b>Specific gravity</b>	Not available
<b>Octanol/water coefficient</b>	Not available
<b>Solubility (H2O)</b>	Complete
<b>Auto-ignition temperature</b>	Not available
<b>VOC (Weight %)</b>	Not available
<b>Viscosity</b>	Water thin
<b>Percent volatile</b>	Not available

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## 10. Stability and Reactivity

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<b>Chemical stability</b>	Stable under recommended storage conditions.
<b>Conditions to avoid</b>	Do not mix with other chemicals. Reacts violently with acids. This product may react with oxidizing agents.
<b>Incompatible materials</b>	Acids. Oxidizing agents.
<b>Hazardous decomposition products</b>	May include and are not limited to: Oxides of carbon. Oxides of sodium.
<b>Possibility of hazardous reactions</b>	Hazardous polymerisation does not occur.

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## 11. Toxicological Information

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### Component analysis - LC50

Ingredient(s)	LC50
Alcohols, C12-16, ethoxylated	Not available
Sodium hydroxide	Not available

### Component analysis - Oral LD50

Ingredient(s)	LD50
Alcohols, C12-16, ethoxylated	1380 mg/kg rat
Sodium hydroxide	Not available

### Effects of acute exposure

<b>Eye</b>	May cause chemical burns. May cause blindness.
<b>Skin</b>	May cause chemical burns. Harmful contact may not cause immediate pain.
<b>Inhalation</b>	May cause respiratory tract irritation.
<b>Ingestion</b>	Harmful if swallowed. May cause chemical burns to mouth, throat and stomach.

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<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>Synergistic Materials</b>	Not available

## 12. Ecological Information

<b>Ecotoxicity</b>	Components of this product have been identified as having potential environmental concerns.
<b>Ecotoxicity - Freshwater Fish Species Data</b>	
Sodium hydroxide	1310-73-2      96 Hr LC50 Oncorhynchus mykiss: 45.4 mg/L [static]
<b>Environmental effects</b>	Harmful to aquatic life.
<b>Aquatic toxicity</b>	Not available
<b>Persistence and degradability</b>	Not available
<b>Bioaccumulation/accumulation</b>	Not available
<b>Partition coefficient</b>	Not available
<b>Mobility in environmental media</b>	Not available
<b>Chemical fate information</b>	Not available
<b>Other adverse effects</b>	Not available

## 13. Disposal Considerations

<b>Waste codes</b>	Not available
<b>Disposal instructions</b>	Dispose in accordance with all applicable regulations.
<b>Waste from residues / unused products</b>	Not available
<b>Contaminated packaging</b>	Not available

## 14. Transport Information

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

**Basic shipping requirements:**

<b>Proper shipping name</b>	SODIUM HYDROXIDE SOLUTION
<b>Hazard class</b>	8
<b>UN number</b>	UN1824
<b>Packing group</b>	II



## 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.

**Canada - WHMIS - Ingredient Disclosure List**

Sodium hydroxide	1310-73-2	1 %
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<b>WHMIS classification</b>	Class E - Corrosive Material
<b>WHMIS status</b>	Controlled



**Inventory Status**

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

<b>Disclaimer</b>	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.
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<b>Expiry Date</b>	01-May-2013
<b>Prepared by</b>	Dell Tech Laboratories Ltd. (519) 858-5021
<b>Other Information</b>	For an updated MSDS, please contact the supplier/manufacturer listed on the first page of the document.