

# MATERIAL SAFETY DATA SHEET

## SECTION I – PRODUCT & COMPANY IDENTIFICATION

**Product Name:** Norsol Etch FS Liquid  
**Product Use:** Aluminum Surface Preparation  
**Manufacturer:** Contact supplier  
**Supplier:** Northern Technical Solutions Inc.  
**Address:** 7040 Wellington Rd 124 South  
 Guelph, ON N1H 6J3  
**Telephone Number:** 519-766-9899  
**Emergency Telephone Number:** 519-766-9899

## SECTION 2 – HAZARDOUS INGREDIENTS

Chemical Name	CAS#	Wt%	ACGIH-TLVs 8 hr TWA	LC <sub>50</sub> (4 hr, Rat)	LD <sub>50</sub> (Oral)
Naphthalenesulfonic acid, polymer with formaldehyde, sodium salt	9084-06-4	10 - 30	Not available	Not available	3800 mg/Kg (rat)
Sodium sulfate	7757-82-6	7 - 13	Not available	Not available	5989 mg/Kg (mouse)

## SECTION 3 – HAZARDS

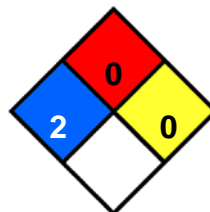
**Emergency Overview:** CAUTION. IRRITANT. MAY IRRITATE EYES AND SKIN. MAY CAUSE ADVERSE EFFECTS IF ABSORBED THROUGH SKIN, INHALED OR SWALLOWED. MAY CAUSE CHRONIC EFFECTS.

**WHMIS:** D2B – Other Toxic Effects



**HMIS & NFPA:**

<b>HEALTH</b>	* 2
<b>FLAMMABILITY</b>	0
<b>PHYSICAL HAZARD</b>	0
<b>PPE</b>	B



Legend	
Extreme Danger	4
Serious	3
Moderate	2
Slight	1
Minimal	0
Chronic	*

**TDG/DOT:** NOT REGULATED

**Target Organs:** Eyes, skin, respiratory system.

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## SECTION 4 - FIRST AID MEASURES

**Eyes:** Immediately flush eye(s) with lukewarm, gently flowing water continuously for at least 20 minutes, while holding the eyelid(s) open. Obtain medical attention immediately.

**Skin:** Remove contaminated clothing and wash skin with soap and plenty of water for at least 20 minutes. Obtain medical attention if symptoms persist.

**Inhalation:** Move victim to fresh air. Obtain medical attention if symptoms persist.

**Ingestion:** Obtain medical attention immediately. Do not induce vomiting. If vomiting occurs naturally, have victim lean forward to reduce the risk of aspiration.

## SECTION 5 - FIRE FIGHTING MEASURES

**Flash Point (°C/°F - TCC):** Not available.      **LEL:** Not available.      **UEL:** Not available.

**Hazardous Combustion Products:** Oxides of carbon, oxides of sulfur.

**Autoignition Temperature (°C/°F):** Not available.

**Extinguishing Media:** Dry chemical, carbon dioxide.

**Fire Fighting Procedures:** Fire-fighters should wear full protective gear with self-contained breathing apparatus (SCBA).

**Fire and Explosion Hazards:** Not available.

**Sensitivity to Mechanical Impact:** Not available.

**Sensitivity to Static Discharge:** Not available.

## SECTION 6 – ACCIDENTAL RELEASE MEASURES

**Personal Precautions:** Before attempting clean-up, refer to Section 8 personal protection. Contact emergency services and supplier for advice.

**Spill Response:** Evacuate unprotected and untrained personnel from the area. The spill should be handled by qualified personnel only. Ventilate the area. Contain spill. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water. Cover spill with a non-combustible material such as vermiculite or other commercially available inorganic absorbent. Cover spill with absorbent until it appears dry. Collect the spilled material and clean up the area. Place waste materials in a closed container suitable for disposal. Refer to Section 13 for disposal considerations.

## SECTION 7 – HANDLING & STORAGE

**Handling:** For industrial or professional use only. As required by employer code. Do not get in eyes or on skin or clothing. Do not breathe mists or fumes. Do not swallow. Do not eat, drink, or smoke in work areas. Avoid contact with incompatible materials. Use only in a well-ventilated area. Keep away from heat, flames or sparks. Remove contaminated clothing and discard or wash before reuse. Maintain good industrial hygiene practices.

**Storage:** As required by employer code. Keep container closed when not in use. Store in a cool, dry, well-ventilated area. Store away from incompatible materials. Maintain good industrial hygiene practices.

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## SECTION 8 – PERSONAL PROTECTIVE EQUIPMENT & EXPOSURE CONTROLS

**Eye/Face Protection:** As required by employer code. Avoid contact. Wear chemical safety goggles.

**Hand Protection:** As required by employer code. Avoid contact. Wear chemical resistant gloves. Select and use gloves based on the results of a workplace exposure assessment. Consult ACGIH or your glove manufacturer for selection of appropriate compatible materials.

**Skin Protection:** As required by employer code. Avoid contact. Wear appropriate equipment as necessary to prevent exposure. Select and use protective equipment based on the results of a workplace exposure assessment. Consult ACGIH or your equipment manufacturer for selection of appropriate compatible materials.

**Respiratory Protection:** As required by employer code. Do not breathe fumes. Wear appropriate respiratory protection if ventilation is not adequate. Select and use NIOSH approved respiratory equipment based on the results of a workplace exposure assessment.

**Ingestion:** Do not swallow. Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water.

**Ventilation:** Use only in a well-ventilated area or with respiratory protection.

**Engineering Controls:** Use process enclosures, local exhaust ventilation or other engineering controls to keep airborne levels below exposure limits. Have a safety shower and eye-wash fountain readily available in the immediate work area.



**EXPOSURE LIMITS:** Not available

## SECTION 9 – PHYSICAL & CHEMICAL PROPERTIES

**Physical State:** Liquid

**pH:** Not available

**Vapour Density (Air = 1):** Not available available

**Volatiles (Wt%):** Not available

**Viscosity:** Not available

**Solubility in Water:** Not available

**Vapour Pressure:** Not available

**Boiling Point (°C/°F):** Not available

**Odour Threshold (ppm):** Not available

**Appearance; Odour:** Opaque; characteristic

**Flash Point (°C/°F - TCC):** Not available

**Autoignition Temperature (°C/°F):** Not available

**Evaporation Rate (Ether =1):** Not available

**Upper Explosive Limit (UEL):** Not available

**Lower Explosive Limit (LEL):** Not available

**Freezing/Melting Point (°C/°F):** Not available

**Specific Gravity (water =1):** Not available

**Coefficient of water/oil:** Not available

## SECTION 10 – STABILITY & REACTIVITY

**Chemical stability:** Stable. Hazardous polymerization will not occur.

**Incompatible Materials:** Oxidizing agents, strong acids.

**Conditions to Avoid:** None known.

**Hazardous Decomposition Products:** Oxides of carbon oxides of sulfur.

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## SECTION 11 - TOXICOLOGICAL INFORMATION

**Routes of Entry:** Eyes, Skin, Inhalation, Absorption, Ingestion

### HEALTH EFFECTS FROM ACUTE EXPOSURE:

**Eyes:** May cause irritation. Symptoms may include redness, pain, and tearing.

**Skin:** May cause irritation. Symptoms may include localized redness, swelling, itching and pain.

**Inhalation:** May cause respiratory tract irritation.

**Ingestion:** May cause gastrointestinal effects including nausea, vomiting and diarrhea. Aspiration into the lungs may cause chemical pneumonitis.

### ACUTE TOXICITY DATA:

	<u>RTECS #</u>	<u>Inhalation</u> <u>4 hours LC<sub>50</sub></u>	<u>Ingestion</u> <u>LD<sub>50</sub></u>
Naphthalenesulfonic acid, polymer with formaldehyde, sodium salt (9084-06-4)	Not available	Not available	3800 mg/Kg (rat)
Sodium sulphate (7757-82-6)	WE1650000	Not available	5989 mg/Kg (mouse)

### HEALTH EFFECTS FROM CHRONIC EXPOSURE:

**Aggravation of Pre-existing Conditions:** Insufficient data available.

**Skin:** Prolonged or repeated exposure can cause drying, defatting and dermatitis.

**Irritancy:** Hazardous by WHMIS/OSHA criteria.

**Sensitization:** Insufficient data available.

**Reproductive Effects:** Insufficient data available.

**Teratogenicity:** Insufficient data available.

**Mutagenicity:** Insufficient data available.

**Carcinogenicity:** Insufficient data available.

**Toxicologically Synergistic Materials:** Not available.

## SECTION 12 - ECOLOGICAL INFORMATION

**Environmental Effects:** Not determined.

**Ecotoxicity data:** Not determined.

**Ecofate Data:** Not determined.

## SECTION 13 – DISPOSAL CONSIDERATIONS

**Disposal:** Consult applicable regulations and authorities prior to disposal.

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**SECTION 14 - TRANSPORTATION**

**Transportation of Dangerous Goods (TDG):** NOT REGULATED

**US Department of Transportation (DOT):** NOT REGULATED

**SECTION 15 - REGULATORY INFORMATION**

**CANADA:** The components of this product are listed on the Domestic Substances List (DSL) or are exempt.

This controlled product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and this MSDS contains all the information required by the CPR.

**WHMIS Classification:** D2B Other Toxic Effects

**Hazardous Products Act - Ingredient Disclosure List (IDL):** Not listed

**UNITED STATES:** The components of this product are listed on the Toxic Substances Control Act (TSCA) inventory list or are exempt.

**OSHA:** This product is considered Hazardous as defined by the OSHA Hazard Communication Standard Code of Federal Regulations, 29 CFR 1910.1200.

**Title III SARA/EPCRA Sections 311 & 312 - Hazard Categories:**

<u>Chemical</u>	<u>CAS#</u>	<u>Fire</u>	<u>Pressure</u>	<u>Reactivity</u>	<u>Acute</u>	<u>Chronic</u>
Naphthalenesulfonic acid, polymer with formaldehyde, sodium salt	9084-06-4	Yes	No	No	Yes	Yes
Sodium sulphate	7757-82-6	No	No	No	Yes	Yes

**Title III SARA/EPCRA Section 313 - Toxic Chemicals – Toxic Release Inventory:** Not listed

**Title III SARA/EPCRA Sections 302 & 304 - Extremely Hazardous Substances - Threshold Planning Quantities:** Not listed

**CERCLA - Hazardous Substances – Reportable Quantities:** None listed

**RCRA:** Consult applicable regulations and authorities prior to disposal.

**Clean Air Act (CAA):**

None of the chemicals in this product are listed as a hazardous air pollutant.

Does not contain any Class 1 Ozone depleters.

Does not contain any Class 2 Ozone depleters.

**Clean Water Act (CWA):**

None of the chemicals in this product are listed as a Hazardous Substance under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

**SECTION 16 - OTHER INFORMATION**

**MSDS Prepared by:** Technical Service. Contact supplier for information.

**Date:** July 1, 2013

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