

## FIL Quantum XL

## SAFETY DATA SHEET

Issue Date: 22-Aug-16

**1. Product and Company Identification**

<b>Product Name:</b>	<b>FIL Quantum XL</b>
<b>Proper Shipping Name:</b>	Sodium Hydroxide Solution
<b>Synonyms:</b>	Caustic Soda Solution
<b>Recommended Use:</b>	Cleaner/alkali
<b>Molecular Formula:</b>	NaOH
<b>Manufacturer:</b>	FIL is a wholly owned subsidiary of GEA Farm Technologies New Zealand Ltd
<b>Address:</b>	72 Portside Drive, Mt Maunganui
<b>Telephone Number:</b>	07 575 2162
<b>Fax Number:</b>	07 575 2161
<b>Emergency phone No: 24hr</b>	0508 434 569
<b>Website:</b>	www.fil.co.nz
<b>Email:</b>	info@fil.co.nz

**2. Hazards Identification**

**Dangerous Goods:** Dangerous Goods Class 8, packing group II

**Hazardous Substance (HSNO):**

**DANGER**

**HSNO Classification and**

**Hazard Statements:**

**6.1D Acutely Toxic Substance (Medium Hazard)**

H302 Harmful if swallowed.  
H312 Harmful in contact with skin.  
H332 Harmful if inhaled.

**6.1E Acutely Toxic Substance (Medium Hazard)**

H303 May be harmful if swallowed.

**8.1A Corrosive to Metals (High Hazard)**

H290 May be corrosive to metals.

**8.2B Corrosive to Dermal Tissue High Hazard)**

H314 Causes severe skin burns and eye damage.

**8.3A Corrosive to Occular Tissue (High Hazard)**

H318 Causes serious eye damage.

**9.1D Ecotoxic in the Aquatic Environment (Low Hazard)**

H413 May cause long lasting harmful effects to aquatic life.

**Prevention statements:**

P102 Keep out of reach of children.  
P103 Read label before use.  
P104 Read safety data sheet before use.  
P234 Keep only in original container.  
P260 Do not breathe vapours/spray.  
P264 Wash hands thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P271 Use only outdoors or in a well-ventilated area.  
P273 Avoid release to the environment.  
P280 Wear protective gloves, protective clothing and eye/face protection.

**Response statements:**

P101 If medical advice is needed, have product container or label at hand.

P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately dilute with 120-240 mL of water or milk.

P302+P352 IF ON SKIN: Wash with plenty of soap and water.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water

P304+P340 IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER or doctor/physician.

P312 Call a POISON CENTER or doctor/physician if you feel unwell.

P330 Rinse mouth.

P331 Do NOT induce vomiting.

P363 Wash contaminated clothing before reuse.

P390 Absorb spillage to prevent material damage.

**Storage statements:**

P405 Store locked up.

P406 Store in corrosive resistant(possibly stainless steel) container with a resistant inner liner.

### 3. Composition/Information on Ingredients

**Appearance:** Clear liquid

**CAS No:** 1310-73-2 Sodium hydroxide (20-40%)  
Water, surfactant, builder (to 100%)

### 4. First Aid Measures

**Ingestion:** Call a doctor. Rinse mouth then give a glass or two of water or milk. DO NOT induce vomiting unless medical assistance is delayed by 15 minutes (take care to avoid patient inhaling stomach contents). If breathing stops start mouth to nose resuscitation. Arrange urgent transport to hospital.

**Eye Contact:** Wash eye with gently running water for at least 20 minutes. Do not rub the eye. Cover with sterile dressing. Seek medical attention immediately.

**Skin Contact:** Quickly remove contaminated clothing. Wash skin with large quantities of water. Bathe affected areas in warm saline solution. Seek medical attention.

**Inhalation:** Remove the casualty from further contamination.

**Notes to Physician:** Treat symptomatically.

### 5. Fire-fighting Measures

**Specific Hazards:** Nil - not combustible. Decomposes on heating emitting toxic fumes. Fire fighters to wear self-contained breathing apparatus if risk of exposure to products of decomposition.

**Suitable Extinguishing Media:** Water fog (or if unavailable fine water spray), foam, dry chemical powder).

### 6. Accidental Release Measures

**Spill Cleanup Methods:** Follow procedures in FIL Emergency response plan: Chemical Spill. Contain and absorb. Avoid contamination of natural waterways. Small quantities may be washed to drain with large quantities of water.

## 7. Handling and Storage

<b>Handling:</b>	Corrosive. Non-flammable. Avoid spilling, skin and eye contact. Wear protective clothing, including elbow length PVC gloves and suitable eye protection. Use with adequate ventilation - avoid creation and inhalation of aerosols. After use wash hands before eating, drinking or smoking.
<b>Storage:</b>	Do not store with D.G classes 1, 5, 7, acids, food or food containers. Store in original container, tightly closed, away from foodstuffs and out of reach of children.

## 8. Exposure Control/Personal Protection

<b>Exposure Standards:</b>	TWA 1mg/m <sup>3</sup> - product is mainly used outside.
<b>Engineering Controls:</b>	Use with adequate ventilation - avoid creation and inhalation of aerosols.
<b>Personal Protection:</b>	Use elbow length PVC gloves and suitable eye protection.

## 9. Physical and Chemical Properties

<b>Appearance and Odour:</b>	Odourless clear liquid.
<b>Solubility in Water (g/l):</b>	Fully miscible.
<b>Specific Gravity:</b>	1.33
<b>Boiling Point/Melting Point (C):</b>	Not Available
<b>Vapour Pressure: (Pascals or mm of Hg @ 250C):</b>	Not Available
<b>Flashpoint (C):</b>	Nil
<b>Flammability Limits (%):</b>	Not Applicable
<b>pH Value:</b>	9.8

## 10. Stability and Reactivity

<b>Stability:</b>	Incompatible with a wide variety of materials, including acids, many metals, ammonium compounds, cyanides, nitro compounds, phenols, combustible organics. Heat of solution is very high and may lead to a dangerously hot solution if small amounts of water are used.
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## 11. Toxicological Information

<b>General:</b>	Caustic alkali, corrosive and damaging to tissue. Dangerous if ingested, inhaled, gets in eye or absorbed through skin.  Intraperitoneal - mouse LD50 40mg/kg
<b>Ingestion:</b>	Corrosive. Burns in/around the mouth and digestive tract.
<b>Eye Contact:</b>	Corrosive. Intense pain in the eye. Tightly closed. Reddened, swollen or watering excessively. Can't stand light.
<b>Skin Contact:</b>	Very corrosive.
<b>Inhalation:</b>	Unlikely - potentially toxic/corrosive - avoid creating aerosols or mists.

## 12. Ecotoxicity Information

9.1D Ecotoxic in the Aquatic Environment	Prevent from loss into natural waterways. TLM 24 - Small bass 31.7 ppm
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### 13. Disposal Considerations

<b>Container Disposal:</b>	Dispose of empty containers safely in accordance with local regulations. Triple rinse containers when empty. Add rinsings to use solutions. Avoid contamination of natural water supplies with chemical or empty container. After cleaning, all existing labels should be removed.
<b>Product Disposal:</b>	Adjust the pH to neutral, separate any insoluble solids or liquids and package them for hazardous waste disposal. Flush the aqueous solutions down the drain with plenty of water. The hydrolysis and neutralization reactions may generate heat and fumes which can be controlled by the rate of addition. Keep records of date, time, quantity & location of discharge, name & address of user.

### 14. Transport Information

<b>UN No:</b>	1824
<b>Dangerous Goods Class:</b>	8
<b>Hazchem Code:</b>	2R
<b>Packing Group:</b>	II
<b>Proper Shipping Name:</b>	Sodium Hydroxide Solution
<b>Segregation:</b>	Do not store with D.G classes 1, 5, 7, acids, food or food containers.
<b>Limited Quantities:</b>	500 ml
<b>Schedule 1 Quantity:</b>	50 litres

### 15. NZ Regulatory Information

<b>ERMA Approval Code:</b>	HSR002526	
<b>Group standard:</b>	Cleaning Products (Corrosive)	
<b>HSNO Classifications:</b>	6.1D	Acutely Toxic Substance
	6.1E	Acutely Toxic Substance
	8.1A	Corrosive to Metals
	8.2B	Corrosive to Dermal Tissue
	8.3A	Corrosive to Occular Tissue
	9.1D	Ecotoxic in the Aquatic Environment
<b>HSNO Controls:</b>	<u>Trigger quantities for this substance by itself in a Place:</u>	
	<b>Approved Handler Test Certificate:</b>	<i>not required</i>
	<b>Hazardous Substance Location:</b>	<i>not required</i>
	<b>Location Test Certificate:</b>	<i>not required</i>
	<b>Hazardous Atmosphere Zone:</b>	<i>not required</i>
	<b>Emergency Plan:</b>	<i>1000 Litres</i>
	<b>Tracking:</b>	<i>not required</i>
	<b>Warning Sign:</b>	<i>250 Litres</i>
	<b>Record of application or discharge:</b>	<i>Any quantity</i>

### 16. Other Information

<b>Issue Date:</b>	22-Aug-16	
<b>Review Date:</b>	22-Aug-21	
<b>Definitions:</b>	DG	Dangerous Good
	LD50	Lethal dose 50 % kill
	TLM 24	24 Hour median threshold limit
	TWA	Time weighted average: <i>The 8-hour time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure</i>