

FIL Quantum Powder

SAFETY DATA SHEET

Issue Date: 12-Mar-12

1. Product and Company Identification

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

2. Hazards Identification

Dangerous Goods: 8 Corrosive

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.
8.1A Corrosive to Metals (High Hazard)
 H290 May be corrosive to metals.
8.2C Corrosive to Dermal Tissue (Medium 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.
9.3C Ecotoxic to Terrestrial Vertebrates (Medium Hazard)
 H433 Harmful to terrestrial vertebrates.

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:	Odourless white solid	
CAS No:	1310-73-2	Caustic alkalis (to 800g/kg)
	51580-86-0	Organic chlorine (to 60 g/kg)
		Surfactants, builders (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

Handling: 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.
Do not handle broken packages unless wearing appropriate personal protective equipment.

Storage: 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

Exposure Standards: STEL 2mg/m³

Engineering Controls: Use with adequate ventilation - avoid creation and inhalation of aerosols.

Personal Protection: Use elbow length PVC gloves and suitable eye protection.

9. Physical and Chemical Properties

Appearance and Odour: Odourless white solid.
Solubility in Water (g/l): Soluble to approximately 40%
Specific Gravity: Bulk Density ca 1.0
Boiling Point/Melting Point (C): Not Available
Vapour Pressure: (Pascals or mm of Hg @ 250C): Not Available
Flashpoint (C): Nil
Flammability Limits (%): Not Applicable
pH Value: 9.8

10. Stability and Reactivity

Stability: Incompatible with a wide variety of materials, including acids, many metals, ammonium compounds, cyanides, nitro compounds, phenols, combustible organics.
Note: dissolution in water is highly exothermic

11. Toxicological Information

General: Caustic alkali, corrosive and damaging to tissue. Dangerous if ingested, inhaled, gets in eyes.
In eye or absorbed through skin. Typical TLV 2 mg/m
Intraperitoneal - mouse LD50 40mg/kg

Ingestion: Corrosive. Burns in/around the mouth and digestive tract.

Eye Contact: Corrosive. Intense pain in the eye. Tightly closed. Reddened, swollen or watering excessively. Can't stand light.
Eye Rabbit: 1% severe

Skin Contact: Very corrosive.

Inhalation: Unlikely - potentially toxic/corrosive - avoid creating aerosols or mists.

12. Ecotoxicity Information

9.1D Ecotoxic in the Aquatic Environment	TLM 24 - Small bass 31.7 ppm
9.3C Ecotoxic to Terrestrial Vertebrates	Corrosive to all tissue

13. Disposal Considerations

Container Disposal:	Rinse containers before disposal and add rinsings to use solutions. Avoid contamination of any water supply with chemical or empty container. Dispose of empty containers safely in accordance with local regulations.
Product Disposal:	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

UN No:	1823
Dangerous Goods Class:	8
Hazchem Code:	2X
Packing Group:	II
Proper Shipping Name:	Sodium Hydroxide Solid
Segregation:	Do not store with D.G classes 1, 5, 7, acids, food or food containers.
Limited Quantities:	1 kg
Schedule 1 Quantity:	50 kg

15. NZ Regulatory Information

ERMA Approval Code:	HSR002526	
Group standard:	Cleaning Products (Corrosive)	
HSNO Classifications:	6.1D	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
	9.3C	Ecotoxic to Terrestrial Vertebrates
HSNO Controls:	<u>Trigger quantities for this substance by itself in a Place:</u>	
	Approved Handler Test Certificate:	<i>not required</i>
	Hazardous Substance Location:	<i>not required</i>
	Location Test Certificate:	<i>not required</i>
	Hazardous Atmosphere Zone:	<i>not required</i>
	Emergency Plan:	<i>1000 kg</i>
	Tracking:	<i>not required</i>
	Warning Sign:	<i>250 kg</i>
	Record of application or discharge:	<i>Not required</i>

16. Other Information

Issue Date: 12-Mar-12

Review Date: 12-Mar-17

Definitions:	DG	Dangerous Good	
	LD50	Lethal dose 50 % kill	
	STEL	Short term exposure limit	
	TLV	Threshold limit value	
	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>