



# SAFETY DATA SHEET

**PRODUCT NAME:** LIQUI FLOC

Issue Date: September 22

## IDENTIFICATION

**Product Name:** Liqui Floc  
**Other Names:** Liquipac, Liquid PAC, Liquid polyaluminium chloride, PAC solution Polyaluminium chloride  
**Product Code:** CLFPAC20, CLFPAC100, CLFPAC200, CLFPAC1000  
**Uses:** Poly aluminium chloride is a polyvalent inorganic polymer used as coagulant in the treatment of potable water, industrial waste water and many other waste water situations.  
**Supplier:** HamChem Hamilton Chemicals Ltd, 75 Ruffell Rd, Hamilton  
Phone: 079744971 Email: [info@hamchem.nz](mailto:info@hamchem.nz) Web: [www.hamchem.nz](http://www.hamchem.nz)

- In emergency dial 111, and then ask for Fire, Ambulance or Police as necessary.
- In case of poisoning phone National Poisons Centre – 0800 764 766

## HAZARD IDENTIFICATION



### GHS Classifications

Acute Toxicity (Oral) – Category 4  
Skin Corrosion – Category 2  
Eye Irritation – Category 2

**Signal Word:** Warning

### Hazard Statement(s)

H302 – Harmful if swallowed  
H315 – Causes skin irritation  
H319 – Causes serious eye irritation

### Prevention

P264 – Wash hands thoroughly after handling  
P270 – Do not eat, drink or smoke when using this product  
P280 – Wear protective gloves/clothing and eye/face protection

### Response

P301+P312 – IF SWALLOWED: Call a POISON CENTRE or Doctor if you feel unwell  
P330 – Rinse mouth  
P302+P352 – IF ON SKIN: Wash with plenty of soap and water.  
P332+P313 – If skin irritation occurs: seek medical advice/attention.  
P362+P364 – Take off contaminated clothing and wash it before reuse.  
P305+P351+P337 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.  
P337+P313 – If eye irritation persists: Get medical advice/attention.

Recommendations, suggestions or statements made in the bulletins are intended for the assistance of our customers. They are based upon our experience and judgement but must not be regarded as amounting to a legal warranty or as involving any liability on our part and must be read in conjunction with and subject to our Conditions of Sale which apply to goods supplied by us.

HamChem Ltd, 75 Ruffell Road, Hamilton, New Zealand. Phone: 07-974-4971 Email: [info@hamchem.nz](mailto:info@hamchem.nz) Web: [www.hamchem.nz](http://www.hamchem.nz)

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**Disposal**

P501 – Dispose of contents/container to approved waste facility in accordance with local regulations.

**COMPOSITION & INFORMATION ON INGREDIENTS**

Chemical Entity	CAS No.	Proportion (%)
Poly Aluminium Chloride	1327-41-9	>30
Water	7732-18-5	to 100

**FIRST AID MEASURES**

**For advice, contact a Poisons Information Centre (NZ 0800 764 766) or a Doctor.**

**Inhalation:** Remove victim from area of exposure - avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. Keep at rest until fully recovered. Seek medical advice if effects persist.

**Skin Contact:** If skin or hair contact occurs, immediately remove any contaminated clothing and wash skin and hair thoroughly with running water. If swelling, redness, blistering or irritation occurs seek medical assistance.

**Eye Contact:** If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.

**Ingestion:** Rinse mouth with water. If swallowed, give a glass of water to drink. If vomiting occurs give further water. Seek immediate medical assistance.

**Medical attention and special treatment:** Treat symptomatically.

**FIRE FIGHTING MEASURES**

**Suitable Extinguishing Media:** Not combustible, however, if material is involved in a fire use: Extinguishing media appropriate to surrounding fire conditions.

**Specific Hazards Arising from the Chemical:** Non-combustible material.

**Precautions for fire fighters and special protective equipment:** Decomposes on heating emitting toxic fumes, including those of hydrogen chloride. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to products of decomposition.

**ACCIDENTAL RELEASE MEASURES**

**Emergency procedures:** Clear area of all unprotected personnel. If contamination of sewers or waterways has occurred advise local emergency services.

**Methods and materials for containment and clean up:** Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contact. Contain - prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Collect and seal in properly labeled containers or drums for disposal.

**HANDLING & STORAGE**

**Precautions for safe handling:** Avoid skin and eye contact and breathing in vapour, mists and aerosols.

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**Conditions for safe storage:** Store in a cool, dry, well-ventilated place and out of direct sunlight. Store away from incompatible materials described in Section 10. Keep containers closed when not in use - check regularly for leaks.

EXPOSURE CONTROLS & PERSONAL PROTECTION
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**Exposure standards:** No value assigned for this specific material by Worksafe NZ. However, Workplace Exposure Standard(s) for constituent(s):

Aluminium, as Al: Soluble salts WES-TWA 2 mg/m<sup>3</sup>

**Engineering controls:** Ensure ventilation is adequate and that air concentrations of components are controlled below quoted Exposure Standards. Keep containers closed when not in use. If in the handling and application of this material, safe exposure levels could be exceeded, the use of engineering controls such as local exhaust ventilation must be considered and the results documented. If achieving safe exposure levels does not require engineering controls, then a detailed and documented risk assessment using the relevant PPE (refer below) as a basis must be carried out to determine the minimum PPE requirements.

**Personal protective equipment:** Wear overalls, chemical goggles and impervious gloves. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. If risk of inhalation exists, wear suitable mist respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716.

PHYSICAL & CHEMICAL PROPERTIES
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Physical state:	Liquid
Colour:	Water-white to slightly turbid
Odour:	Mild
Solubility in water:	Soluble in water.
Specific Gravity:	1.17 @ 20°C
Relative Vapour Density (air=1):	Not available
Vapour Pressure (20 °C):	Not available
Flash Point (°C):	Not applicable
Flammability Limits (%):	Not applicable
Autoignition Temperature (°C):	Not applicable
Boiling Point/Range (°C):	Not available
Decomposition Point (°C):	Not available
pH:	2 - 4 (10% poly aluminium chloride)
Freezing Point/Range (°C):	-12.0 (approx.)

STABILITY & REACTIVITY
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**Chemical stability:** Slowly corrodes metals.

**Conditions to avoid:** None known.

**Incompatible materials:** Incompatible with calcium hypochlorite, acids, and alkalis.

**Hazardous decomposition products:** Hydrogen chloride.

**Hazardous reactions:** Reacts with calcium hypochlorite, acids, and alkalis.

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**TOXICOLOGICAL INFORMATION**

**Toxicity data:** No LD50 data available for the product. However, for constituent(s)  
POLYALUMINIUM CHLORIDE:  
Oral LD50 (rat): 681 mg/kg.  
Oral LD50 (mice): 316 mg/kg.

**ECOLOGICAL INFORMATION**

Avoid contaminating waterways.

**DISPOSAL CONSIDERATIONS**

Refer to local government authority for disposal recommendations. Dispose of material through a licensed waste contractor. Normally suitable for disposal at approved land waste site.

**TRANSPORT INFORMATION**

Not classified as a Dangerous Good under NZS 5433 Transport of Dangerous Goods on Land.

**REGULATORY INFORMATION**

**HSNO Classifications:** 6.1D, 6.3A, 6.4A

**EPA Approval #:** HSR002684 – Water Treatment Chemicals (Subsidiary Hazard) Group Standard 2020

**OTHER INFORMATION**

**End of SDS.**