



SAFETY DATA SHEET

PRODUCT NAME: LIQUI FLOC

July 2013

IDENTIFICATION

Product Name: Liqui Floc
Other Names: Liquipac * Liquid PAC * Liquid polyaluminium chloride * PAC solution * Polyaluminium chloride
Product Code: CLF20, CLF100
Uses: Water treatment chemical
Supplier: HamChem Hamilton Chemicals Ltd, 355 Kahikatea Drive, Hamilton
Phone: 078475840, Fax 078475882, info@hamchem.co.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

WARNING

Keep out of reach of children

Read label and SDS thoroughly before use.

HSNO Classifications: 6.1D, 6.3A, 6.4A

Transport: Not classified as a Dangerous Good under NZS 5433:2007 Transport of Dangerous Goods on Land.

Hazard Statements: Harmful if swallowed, inhaled or in contact with skin. Causes skin irritation and serious eye irritation.

Precautions: Wash all parts of the body that come into contact thoroughly after handling. Do not eat drink or smoke while using this product. Avoid breathing dust/fume/gas/mist/vapour/spray. Wear protective gloves/protective clothing/eye protection/face protection. Use only outdoors or in a well ventilated area.

COMPOSITION & INFORMATION ON INGREDIENTS

Chemical Entity	CAS No.	Proportion (%)
Poly Aluminium Chloride	1327-41-9	30 – 60%
Water	7732-18-5	to 100%

FIRST AID MEASURES

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, 355 Kahikatea Drive, Hamilton, New Zealand. Phone 07 847 5840 Fax 07 847 5882 E-Mail - info@ hamchem.co.nz

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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.

SYMPTOMS AND EFFECTS, ACUTE AND DELAYED, FROM EXPOSURE

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

Ingestion: Swallowing can result in nausea, vomiting, diarrhoea, and gastrointestinal irritation.

Eye contact: An eye irritant.

Skin contact: Contact with skin will result in irritation.

Inhalation: Breathing in mists or aerosols may produce respiratory irritation.

Long Term Effects: No information available for the product.

FIRE FIGHTING MEASURES

Hazards from combustion products: 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.

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

ACCIDENTAL RELEASE MEASURES

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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.

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

Exposure standards: No value assigned for this specific material by the New Zealand Occupational Safety and Health Service (OSH).

However, Workplace Exposure Standard(s) for constituent(s):
Aluminium, as Al: Soluble salts WES-TWA 2 mg/m³

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.

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

Physical state:	Liquid
Colour:	Water-white to Slightly Turbid
Odour:	Mild
Solubility:	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
Solubility in water (g/L):	>300 (polyaluminium chloride)
Boiling Point/Range (°C):	Not available
pH:	2 - 4 (10% polyaluminium chloride)

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.

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

Dispose of according to local Waste Authority.

TRANSPORT INFORMATION

Road and Rail Transport

Not classified as a Dangerous Good under NZS 5433:2007 Transport of Dangerous Goods on Land.

REGULATORY INFORMATION

HSNO Classifications: 6.1D, 6.3A, 6.4A

OTHER INFORMATION

Key to abbreviations:

End of SDS.

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