LIQUID FLOC

ChemWatch Material Safety Data Sheet
CHEMWATCH 4718-79
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IDENTIFICATION

STATEMENT OF HAZARDOUS NATURE

HAZARDOUS SUBSTANCE. NON-DANGEROUS GOODS.

According to the Criteria of NOHSC, and the ADG Code.

SUPPLIER

Company	Andrew Brands Limited
Address	3 Porana Road, Glenfield, AUCKLAND
Telephone	0800 802 626 or 09 979 3777
Emergency Telephone	0800 243 622
Fax	0800 731 770
Website	www.andrewbrands.co.nz

PERSONAL PROTECTION EQUIPMENT FOR INDUSTRIAL / COMMERICAL ENVIROMENTS

Short Gloves
Overalls
Goggles or Face Respirator

Product Name	Liquid Floc
Other Names	Aqua Floc L

RISK
Irritating to eyes.
Irritating to skin.
Cumulative effects may result following exposure*.
* (limited evidence)

USE

Flocculating agent for potable and industrial water treatment.

PHYSICAL DESCRIPTION / PROPERTIES

APPEARANCE

Water-white to slightly turbid liquid with a mild odour; mixes with water.

Boiling Point	Not Available
Melting Point	Not Available
Vapour Pressure (kPa)	Not Available
Specific Gravity	1.2
Flash Point (deg C)	Not Applicable
Lower Explosive Limit (%)	Not Applicable
Upper Explosive Limit (%)	Not Applicable
Solubility in Water (g/L)	Miscible

INGREDIENTS

NAME	CAS RN	%
aluminium chlorohydrate	12042-91-0	30-60
Water	3372-18-5	>60

HEALTH HAZARD

ACUTE HEALTH EFFECTS

SWALLOWED
The material has NOT been classified by EC Directives or other classification systems as "harmful by ingestion". This is because of the lack of corroborating animal or human evidence. The material may still be damaging to the health of the individual, following ingestion, especially where pre-existing organ (e.g liver, kidney) damage is evident. Present definitions of harmful or toxic substances are generally based on doses producing mortality rather than those producing morbidity (disease, ill-health). Gastrointestinal tract discomfort may produce nausea and vomiting. In an occupational setting however, ingestion of insignificant quantities is not thought to be cause for concern.

EYE
The material may be irritating to the eye, with prolonged contact causing inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.

SKIN
The material may cause skin irritation after prolonged or repeated exposure and may produce a contact dermatitis (nonallergic). This form of dermatitis is often characterised by skin redness (erythema) and swelling epidermis. Histologically there may be intercellular oedema of the spongy layer (spongiosis) and intracellular oedema of the epidermis.

INHALED
Not normally a hazard due to non-volatile nature of product.

CHRONIC HEALTH EFFECTS
As with any chemical product, contact with unprotected bare skin; inhalation of vapour, mist or dust in work place atmosphere; or ingestion in any form, should be avoided by observing good occupational work practice.

FIRST AID

SWALLOWED
If swallowed do NOT induce vomiting.
If vomiting occurs:
1. Lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.
2. Observe the patient carefully.
3. Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.
4. Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.
5. Seek medical advice.

EYE
If this product comes in contact with the eyes:
1. Immediately hold eyelids apart and flush the eye continuously with running water.
2. Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.
3. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.
4. Transport to hospital or doctor without delay.
5. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

SKIN
If skin contact occurs:
1. Immediately remove all contaminated clothing, including footwear
2. Flush skin and hair with running water (and soap if available).
3. Seek medical attention in event of irritation.

INHALED
If fumes or combustion products are inhaled remove from contaminated area.
Other measures are usually unnecessary.

ADVISE TO THE DOCTOR
Treat symptomatically.

PRECAUTIONS FOR USE

INGREDIENTS DATA

ALUMINIUM CHLOROHYDRATE:

TLV TWA: 2 mg/m³ soluble salts [ACGIH]
aluminium soluble salts, as Al (A.Wt: 26.98)
ES TWA: 2 mg/m³
TLV TWA: 2 mg/m³
The TLV is based on the exposures to aluminium chloride and the amount of hydrolysed acid and the corresponding acid TLV to provide the same degree of freedom from irritation. Workers chronically exposed to aluminium dusts and fumes have developed severe pulmonary reactions including fibrosis, emphysema and pneumothorax. A much rarer encephalopathy has also been described.

WATER:

No exposure limits set by NOHSC or ACGIH

ENGINEERING CONTROLS

None under normal operating conditions.
General exhaust is adequate under normal operating conditions. Local exhaust ventilation may be required in special circumstances. If risk of overexposure exists, wear approved respirator. Supplied-air type respirator may be required in special circumstances. Correct fit is essential to ensure adequate protection. Provide adequate ventilation in warehouses and enclosed storage areas. Air contaminants generated in the workplace possess varying "escape" velocities which, in turn, determine the "capture velocities" of fresh circulating air required to effectively remove the contaminant.

Type of Contaminant:	Air Speed:
solvent, vapours, degreasing etc., evaporating from tank (in still air).	0.25-0.5 m/s (50-100 f/min)
aerosols, fumes from pouring operations, intermittent container filling, low speed conveyer transfers, welding, spray drift, plating acid fumes, pickling (released at low velocity into zone of active generation)	0.5-1 m/s (100-200 f/min.)
direct spray, spray painting in shallow booths, drum filling, conveyer loading, crusher dusts, gas discharge (active generation into zone of rapid air motion)	1-2.5 m/s (200-500 f/min.)
grinding, abrasive blasting, tumbling, high speed wheel generated dusts (released at high initial velocity into zone of very high rapid air motion)	2.5-10 m/s (500-2000 f/min.)

Within each range the appropriate value depends on:	
Lower end of the range	Upper end of the range
1: Room air currents minimal or favourable to capture	1: Disturbing room air currents
2: Contaminants of low toxicity or of nuisance value only.	2: Contaminants of high toxicity
3: Intermittent, low production.	3: High production, heavy use
4: Large hood or large air mass in motion	4: Small hood-local control only

Simple theory shows that air velocity falls rapidly with distance away from the opening of a simple extraction pipe. Velocity generally decreases with the square of distance from the extraction point (in simple cases). Therefore the air speed at the extraction point should be adjusted, accordingly, after reference to distance from the contaminating source. The air velocity at the extraction fan, for example, should be a minimum of 1-2 m/s (200-400 f/min) for extraction of solvents generated in a tank 2 meters distant from the extraction point. Other mechanical considerations, producing performance deficits within the extraction apparatus, make it essential that theoretical air velocities are multiplied by factors of 10 or more when extraction systems are installed or used.

PERSONAL PROTECTION

EYES

- Safety glasses with side shields.
- Chemical goggles.
- Contact lenses pose a special hazard; soft lenses may absorb irritants and all lenses concentrate them. DO NOT wear contact lenses.

HANDS / FEET

Wear chemical protective gloves, eg. PVC.
Wear safety footwear or safety gumboots, eg. Rubber

OTHER
- Overalls.
- P.V.C. apron.
- Barrier cream.
- Skin cleansing cream.
- Eye wash unit.

SAFE HANDLING

STORAGE AND TRANSPORT

PROCEDURES FOR HANDLING
- Limit all unnecessary personal contact.
- Wear protective clothing when risk of exposure occurs.
- Use in a well-ventilated area.
- Avoid contact with incompatible materials.
- When handling, DO NOT eat, drink or smoke.
- Keep containers securely sealed when not in use.
- Avoid physical damage to containers.
- Always wash hands with soap and water after handling.
- Work clothes should be laundered separately.
- Use good occupational work practice.
- Observe manufacturer's storing and handling recommendations.
- Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions are maintained.

DO NOT allow clothing wet with material to stay in contact with skin

SUITABLE CONTAINER
- Lined metal can, Lined metal pail/ can
- Plastic pail
- Polyliner drum
- Packing as recommended by manufacturer.
- Check all containers are clearly labelled and free from leaks.

STORAGE INCOMPATIBILITY
Store away from alkali metals, calcium hypochlorite and acids.
Slowly corrodes metals.

STORAGE REQUIREMENTS
Store below 38 deg. C.
- Store in original containers.
- Keep containers securely sealed.
- Store in a cool, dry, well-ventilated area.
- Store away from incompatible materials and foodstuff containers.
- Protect containers against physical damage and check regularly for leaks.
- Observe manufacturer's storing and handling recommendations.

TRANSPORTATION

Shipping Name	None
ARD Number	None
UN Number	None
Packing Group	None
Dangerous Goods Class	None
Subsidiary Risk	None
Hazchem Code	None
Poisons Schedule Number	None
Labels Required	None

SAFETY
Do not breathe gas/fumes/vapour/spray.
Avoid contact with skin.
Wear eye/face protection.
In case of contact with eyes, rinse with plenty of water and contact Doctor or Poisons Information Centre.

SPILLS AND DISPOSAL

MINOR SPILLS
Slippery when spilt.
- Clean up all spills immediately.
- Avoid breathing vapours and contact with skin and eyes.
- Control personal contact by using protective equipment.
- Contain and absorb spill with sand, earth, inert material or vermiculite.
- Wipe up.
- Place in a suitable labelled container for waste disposal.

MAJOR SPILLS
Slippery when spilt.
Minor hazard.
- Clear area of personnel.
- Alert Fire Brigade and tell them location and nature of hazard.
- Control personal contact by using protective equipment as required.
- Prevent spillage from entering drains or water ways.
- Contain spill with sand, earth or vermiculite.
- Collect recoverable product into labelled containers for recycling.
- Absorb remaining product with sand, earth or vermiculite and place in appropriate containers for disposal.
- Wash area and prevent runoff into drains or waterways.
- If contamination of drains or waterways occurs, advise emergency services.

DISPOSAL CONSIDERATIONS
- Recycle wherever possible or consult manufacturer for recycling options.
- Consult State Land Waste Management Authority for disposal.
- Recycle containers if possible, or dispose of in an authorised landfill.

FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA
The product contains a substantial proportion of water, therefore there are no restrictions on the type of extinguishing media which may be used. Choice of extinguishing media should take into account surrounding areas.
Though the material is non-combustible, evaporation of water from the mixture, caused by the heat of nearby fire, may produce floating layers of combustible substances.
In such an event consider:
- foam
- dry chemical powder
- carbon dioxide

FIRE FIGHTING
- Alert Fire Brigade and tell them location and nature of hazard.
- Wear breathing apparatus plus protective gloves for fire only.
- Prevent, by any means available, spillage from entering drains or watercourses.
- Use fire fighting procedures suitable for surrounding area.
- DO NOT approach containers suspected to be hot.
- Cool fire exposed containers with water spray from a protected location.
- If safe to do so, remove containers from path of fire.
- Equipment should be thoroughly decontaminated after use.

FIRE/EXPLOSION HAZARD

- Non combustible.
- Not considered to be a significant fire risk.
- Expansion or decomposition on heating may lead to violent rupture of containers.
- Decomposes on heating and may produce toxic fumes of carbon monoxide (CO).
- May emit acrid smoke.

Decomposition may produce toxic fumes of , carbon dioxide (CO2) , hydrogen chloride , phosgene , other pyrolysis products typical of burning organic material.

FIRE INCOMPATIBILITY

Reacts with mild steel, galvanised steel and zinc to produce hydrogen (H2).

CONDITIONS CONTRIBUTING TO INSTABILITY

- Presence of incompatible materials.
- Product is considered stable.
- Hazardous polymerisation will not occur.

HAZCHEM

None.

CONTACT POINT

In the event of a chemical event of a chemical incident phone **0800 243 622** for immediate assistance.

AUSTRALIAN POISONS INFORMATION CENTRE

24 HOUR SERVICE:	13 11 26
POLICE, FIRE BRIGADE OR AMBULANCE:	000

NEW ZEALAND POISONS INFORMATION CENTRE

24 HOUR SERVICE:	0800 POISON or +643 353 0199
NZ EMERGENCY SERVICES:	111

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