

# Dryden Aqua Ltd

## SAFETY DATA SHEET

### 1. Identification

**Product identifier** **APF POOLS**  
**Other means of identification** Not available.  
**Recommended use** Multi-spectrum flocculant and coagulant  
**Recommended restrictions** No other uses are advised.

#### Manufacturer/Importer/Supplier/Distributor information

##### Manufacturer

**Company name** Dryden Aqua Ltd  
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### 2. Hazard(s) identification

**Physical hazards** Not classified.  
**Health hazards** Serious eye damage/eye irritation Category 1  
Sensitization, skin Category 1  
**Environmental hazards** Not classified.  
**OSHA defined hazards** Not classified.

#### Label elements



**Signal word** Danger

#### Hazard statement

H317 May cause an allergic skin reaction.  
H318 Causes serious eye damage.

#### Precautionary statement

##### Prevention

P261 Avoid breathing mist or vapor.  
P272 Contaminated work clothing must not be allowed out of the workplace.  
P280 Wear protective gloves.  
P280 Wear eye/face protection.

##### Response

P302 + P350 If on skin: Wash with plenty of water/soap.  
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/doctor/physician.  
P321 Specific treatment (see this label).  
P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.  
P363 Wash contaminated clothing before reuse.

##### Storage

Not available.

##### Disposal

P501 Dispose of contents/container (in accordance with related regulations).

**Hazard(s) not otherwise classified (HNOC)** None known.

Supplemental information None.

### 3. Composition/information on ingredients

#### Mixtures

| Chemical name                         | Common name and synonyms  | CAS number | %        |
|---------------------------------------|---|------------|----------|
| Aluminium chloride hydroxide sulphate |   | 39290-78-3 | 5 - < 10 |
| Aluminium Chlorohydrate               | Dialuminium chloride pentahydroxide<br>Aluminium chloride hydroxide | 12042-91-0 | 3 - < 5  |
| Lanthanum Chloride, Anhydrous         |   | 10099-58-8 | 1 - < 3  |
| POLYDADMAC                            |   | 26062-79-3 | 1 - < 3  |

\*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

### 4. First-aid measures

|   |   |
|---|---|
| <b>Inhalation</b>   | Move to fresh air. Call a physician if symptoms develop or persist.   |
| <b>Skin contact</b>   | Remove contaminated clothing immediately and wash skin with soap and water. In case of eczema or other skin disorders: Seek medical attention and take along these instructions.                                  |
| <b>Eye contact</b>  | Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention immediately.                                       |
| <b>Ingestion</b>  | Rinse mouth. Get medical attention if symptoms occur.   |
| <b>Most important symptoms/effects, acute and delayed</b>                     | May cause temporary blindness and severe eye damage. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause an allergic skin reaction. Dermatitis. Rash. |
| <b>Indication of immediate medical attention and special treatment needed</b> | Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.  |
| <b>General information</b>  | Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.   |

### 5. Fire-fighting measures

|  |   |
|--|---|
| <b>Suitable extinguishing media</b>                                  | Water fog. Foam. Dry chemical powder. Carbon dioxide (CO <sub>2</sub> ).  |
| <b>Unsuitable extinguishing media</b>                                | Do not use water jet as an extinguisher, as this will spread the fire.  |
| <b>Specific hazards arising from the chemical</b>                    | This product is an aqueous mixture which will not burn. During fire, gases hazardous to health may be formed.   |
| <b>Special protective equipment and precautions for firefighters</b> | Self-contained breathing apparatus and full protective clothing must be worn in case of fire.   |
| <b>Fire fighting equipment/instructions</b>                          | Move containers from fire area if you can do so without risk.<br>Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.<br>No unusual fire or explosion hazards noted. |
| <b>Specific methods</b>  | Use standard firefighting procedures and consider the hazards of other involved materials.  |
| <b>General fire hazards</b>  | No unusual fire or explosion hazards noted.   |

### 6. Accidental release measures

|  |  |
|--|--|
| <b>Personal precautions, protective equipment and emergency procedures</b> | Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Avoid breathing mist or vapor. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.  |
| <b>Methods and materials for containment and cleaning up</b>               | Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place into containers. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water.<br><br>Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.<br><br>Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. |
| <b>Environmental precautions</b>   | Avoid discharge into drains, water courses or onto the ground.   |

### 7. Handling and storage

|                                      |   |
|--------------------------------------|---|
| <b>Precautions for safe handling</b> | Do not get this material in contact with eyes. Avoid breathing mist or vapor. Avoid contact with eyes, skin, and clothing. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. |
|--------------------------------------|---|

**Conditions for safe storage, including any incompatibilities**

Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

**8. Exposure controls/personal protection****Occupational exposure limits**

No exposure limits noted for ingredient(s).

**Biological limit values**

No biological exposure limits noted for the ingredient(s).

**Appropriate engineering controls**

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station.

**Individual protection measures, such as personal protective equipment****Eye/face protection**

Do not get in eyes. Wear safety glasses with side shields (or goggles). Chemical goggles are recommended.  
Provide an emergency eye wash fountain and quick drench shower in the immediate work area.

**Skin protection****Hand protection**

Contains a potential skin sensitizer. Wear appropriate chemical resistant gloves.  
Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.

**Other**

Wear appropriate chemical resistant clothing. Normal work clothing (long sleeved shirts and long pants) is recommended.

**Respiratory protection**

In case of insufficient ventilation, wear suitable respiratory equipment. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

**Thermal hazards**

Not applicable.

**General hygiene considerations**

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

**9. Physical and chemical properties****Appearance****Physical state**

Liquid.

**Form**

Free flowing

**Color**

Blue

**Odor**

Odorless.

**Odor threshold**

Not applicable

**pH**

3.0 - 4.0

**Melting point/freezing point**

< 26.6 °F (< -3 °C)

**Initial boiling point and boiling range**

215.6 °F (102 °C)

**Flash point**

Not applicable

**Evaporation rate**

Not available

**Flammability (solid, gas)**

Not applicable

**Upper/lower flammability or explosive limits****Flammability limit - lower (%)**

Not applicable

**Flammability limit - upper (%)**

Not applicable

**Explosive limit - lower (%)**

Not applicable

**Explosive limit - upper (%)**

Not applicable

**Vapor pressure**

Not available

**Vapor density**

Not available

**Relative density**

Not available.

**Solubility(ies)****Solubility (water)**

Miscible

**Auto-ignition temperature**

Not applicable

**Decomposition temperature**

Not available

**Viscosity**

60 - 100 cP @ 25C

**Other information**

|                  |                               |
|------------------|-------------------------------|
| Density          | 1.10 - 1.30 g/cm <sup>3</sup> |
| Percent volatile | 85.2 % estimated              |
| Specific gravity | 1.05 - 1.25                   |

**10. Stability and reactivity**

|   |   |
|---|---|
| <b>Reactivity</b>                         | The product is stable and non-reactive under normal conditions of use, storage and transport.   |
| <b>Chemical stability</b>                 | Material is stable under normal conditions.   |
| <b>Possibility of hazardous reactions</b> | No dangerous reaction known under conditions of normal use.<br>Hazardous polymerization does not occur.   |
| <b>Conditions to avoid</b>                | Contact with incompatible materials. None under normal conditions.<br>Do not expose to temperatures above 75 °C. Do not freeze.                       |
| <b>Incompatible materials</b>             | Keep away from oxidising agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.<br>May be corrosive to metals. |
| <b>Hazardous decomposition products</b>   | No hazardous decomposition products are known.  |

**11. Toxicological information****Information on likely routes of exposure**

|                     |  |
|---------------------|--|
| <b>Inhalation</b>   | No adverse effects due to inhalation are expected. |
| <b>Skin contact</b> | May cause an allergic skin reaction.               |
| <b>Eye contact</b>  | Causes serious eye damage.                         |
| <b>Ingestion</b>    | Expected to be a low ingestion hazard.             |

**Symptoms related to the physical, chemical and toxicological characteristics** Rash. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause an allergic skin reaction. Dermatitis. May cause temporary blindness and severe eye damage.

**Information on toxicological effects**

**Acute toxicity** May cause an allergic skin reaction.

| Product  | Species | Test Results            |
|--|---------|-------------------------|
| APF Pools (CAS Mixture)                                |         |                         |
| <b>Acute</b>   |         |                         |
| <i>Dermal</i>  |         |                         |
| LD50   | Rat     | 20605 mg/kg bw          |
| <i>Inhalation</i>                                      |         |                         |
| LC50   | Rat     | 66 mg/l, 4 hours        |
| <i>Oral</i>  |         |                         |
| LD50   | Rat     | 16794 mg/kg bw          |
| Components   | Species | Test Results            |
| Aluminium chloride hydroxide sulphate (CAS 39290-78-3) |         |                         |
| <b>Acute</b>   |         |                         |
| <i>Dermal</i>  |         |                         |
| LD50   | Rat     | 2360 mg/kg bw           |
| <i>Inhalation</i>                                      |         |                         |
| LC50   | Rat     | >= 5 mg/l, 4 hours Mist |
| <i>Oral</i>  |         |                         |
| LD50   | Rat     | > 2000 mg/kg bw         |
| Aluminium Chlorohydrate (CAS 12042-91-0)               |         |                         |
| <b>Acute</b>   |         |                         |
| <i>Dermal</i>  |         |                         |
| LD50   | Rat     | > 2000 mg/kg bw         |
| <i>Oral</i>  |         |                         |
| LD50   | Rat     | > 2000 mg/kg bw         |

| Components                                     | Species | Test Results         |
|--|---------|----------------------|
| Lanthanum Chloride, Anhydrous (CAS 10099-58-8) |         |                      |
| <b>Acute</b>                                   |         |                      |
| <i>Dermal</i>                                  |         |                      |
| LD50   | Rabbit  | > 1638 mg/kg bw      |
| <i>Oral</i>                                    |         |                      |
| LD50   | Rat     | 2361 - 2909 mg/kg bw |
| POLYDADMAC (CAS 26062-79-3)                    |         |                      |
| <b>Acute</b>                                   |         |                      |
| <i>Oral</i>                                    |         |                      |
| LD50   | Rat     | > 5000 mg/kg         |

\* Estimates for product may be based on additional component data not shown.

**Skin corrosion/irritation** Prolonged skin contact may cause temporary irritation.

**Serious eye damage/eye irritation** Causes serious eye damage.

**Respiratory or skin sensitization**

**Respiratory sensitization** Not available.

**Skin sensitization** May cause an allergic skin reaction.

**Germ cell mutagenicity** No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

**Carcinogenicity** This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)**

Not listed.

**Reproductive toxicity** This product is not expected to cause reproductive or developmental effects.

**Specific target organ toxicity - single exposure** Not classified.

**Specific target organ toxicity - repeated exposure** Not classified.

**Aspiration hazard** Not applicable.

**12. Ecological information**

**Ecotoxicity** The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

| Components   | Species | Test Results   |
|--|---------|--|
| Aluminium chloride hydroxide sulphate (CAS 39290-78-3) |         |  |
| <b>Aquatic</b>   |         |  |
| Crustacea  | EC50    | Daphnia  |
|  |         | > 200 mg/l, 48 hours                                     |
|  |         | > 0.15 mg/l, 48 hours dissolved Al                       |
| Fish   | EC50    | Danio (Danio)  |
|  |         | > 0.357 mg/l dissolved Al                                |
| Aluminium Chlorohydrate (CAS 12042-91-0)               |         |  |
| <b>Aquatic</b>   |         |  |
| Crustacea  | NOEC    | Daphnia  |
|  |         | > 160 mg/l, 48 hours similar substance                   |
| Fish   | LC50    | Zebra danio (Danio rerio)                                |
|  |         | > 100 mg/l, 96 hours                                     |
|  | NOEC    | Zebra danio (Danio rerio)                                |
|  |         | > 0.357 mg/l, 96 hours aluminium                         |
| Lanthanum Chloride, Anhydrous (CAS 10099-58-8)         |         |  |
| <b>Aquatic</b>   |         |  |
| Crustacea  | EC50    | Daphnia  |
|  |         | 43.2 µg/l, 48 hours static 0.974 mg/l, 21 days mortality |

| Components                  |      | Species                | Test Results                  |
|-----------------------------|------|------------------------|-------------------------------|
|                             | NOEC | Daphnia                | 0.176 mg/l, 21 days mortality |
| Fish                        | NOEC | Carp (Cyprinus carpio) | 0.46 mg/l, 21 days OECD 24    |
| POLYDADMAC (CAS 26062-79-3) |      |                        |                               |
| <b>Aquatic</b>              |      |                        |                               |
| Crustacea                   | EC50 | Daphnia                | > 10 mg/l, 48 hours OECD202   |
| Fish                        | LC50 | Fish                   | > 10 mg/l, 96 hours OECD203   |

\* Estimates for product may be based on additional component data not shown.

|                                      |   |
|--------------------------------------|---|
| <b>Persistence and degradability</b> | The product contains inorganic compounds which are not biodegradable. The other components of the product are slowly biodegradable.   |
| <b>Bioaccumulative potential</b>     | No data available. Theoretically low bioaccumulation potential  |
| <b>Mobility in soil</b>              | No data available. The product is miscible with water. May spread in water systems.   |
| <b>Other adverse effects</b>         | No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component. |

### 13. Disposal considerations

|  |  |
|--|--|
| <b>Disposal instructions</b>                 | Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.                         |
| <b>Local disposal regulations</b>            | Dispose in accordance with all applicable regulations.   |
| <b>Hazardous waste code</b>                  | The waste code should be assigned in discussion between the user, the producer and the waste disposal company.   |
| <b>Waste from residues / unused products</b> | Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions). Dispose of in accordance with local regulations. |
| <b>Contaminated packaging</b>                | Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.       |

### 14. Transport information

#### DOT

Not regulated as dangerous goods.

#### IATA

Not regulated as dangerous goods.

#### IMDG

Not regulated as dangerous goods.

|   |   |
|---|---|
| <b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b> | This substance/mixture is not intended to be transported in bulk. |
|---|---|

### 15. Regulatory information

|                               |   |
|-------------------------------|---|
| <b>US federal regulations</b> | This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.<br>All components are on the U.S. EPA TSCA Inventory List. |
|-------------------------------|---|

#### CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

#### SARA 304 Emergency release notification

Not regulated.

#### OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not listed.

#### Superfund Amendments and Reauthorization Act of 1986 (SARA)

|                          |   |
|--------------------------|---|
| <b>Hazard categories</b> | Immediate Hazard - Yes<br>Delayed Hazard - No<br>Fire Hazard - No<br>Pressure Hazard - No<br>Reactivity Hazard - No |
|--------------------------|---|

#### SARA 302 Extremely hazardous substance

Not listed.

|  |    |
|--|----|
| <b>SARA 311/312 Hazardous chemical</b> | No |
|--|----|

**SARA 313 (TRI reporting)**

Not regulated.

**Other federal regulations****Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.**US state regulations****US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)**

Not listed.

**US. New Jersey Worker and Community Right-to-Know Act**

Not listed.

**US. Pennsylvania Worker and Community Right-to-Know Law**

Not listed.

**US. California Proposition 65**

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

**International Inventories**

| Country(s) or region        | Inventory name  | On inventory (yes/no)* |
|-----------------------------|---|------------------------|
| Australia                   | Australian Inventory of Chemical Substances (AICS)                | No                     |
| Canada                      | Domestic Substances List (DSL)                                    | Yes                    |
| Canada                      | Non-Domestic Substances List (NDSL)                               | No                     |
| China                       | Inventory of Existing Chemical Substances in China (IECSC)        | Yes                    |
| Europe                      | European Inventory of New and Existing Chemicals (EINECS)         | Yes                    |
| Europe                      | European List of Notified Chemical Substances (ELINCS)            | No                     |
| Japan                       | Inventory of Existing and New Chemical Substances (ENCS)          | No                     |
| Korea                       | Existing Chemicals List (ECL)                                     | Yes                    |
| New Zealand                 | New Zealand Inventory   | No                     |
| Philippines                 | Philippine Inventory of Chemicals and Chemical Substances (PICCS) | No                     |
| United States & Puerto Rico | Toxic Substances Control Act (TSCA) Inventory                     | Yes                    |

A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

**16. Other information, including date of preparation or last revision**

|                      |             |
|----------------------|-------------|
| <b>Issue date</b>    | Jul-24-2015 |
| <b>Revision date</b> | Jan-04-2018 |
| <b>Version #</b>     | 03          |

**Disclaimer** The information in the sheet was written based on the best knowledge and experience currently available.  
**MANUFACTURER DISCLAIMER:** The information given within this SDS is correct to the best of our knowledge, information and belief at the date of its revision and publication. However, the manufacturer makes no representation, warranty or guarantee as to its accuracy, reliability or completeness, nor assumes any liability for its use. It is the user's responsibility to confirm in advance that the information is current, applicable and suitable to their circumstances for each particular use. No representative of ours has authority to waive this provision. Please call for document accuracy if the revision date has exceeded 3 years.

**Revision Information** Product and Company Identification: Product and Company Identification  
 Composition / Information on Ingredients: Ingredients  
 Physical & Chemical Properties: Multiple Properties  
 Toxicological Information: Toxicological Data  
 Regulatory Information: United States  
 GHS: Classification