# SAFETY DATA SHEET - Turbiclear™

ABN: 49 158 485 039

PO Box 199 | Peregian Beach QLD 4573
Unit 7, 8 Grebe St | Peregian Beach QLD 4573

t 07 5471 2290 | f 07 5302 6680
e info@turbid.com.au | w turbid.com.au

<table>
<thead>
<tr>
<th>1. IDENTIFICATION OF MATERIAL AND SUPPLIER</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Product Name:</strong> Turbiclear</td>
</tr>
<tr>
<td><strong>Chemical Name:</strong> Aluminium chlorohydrate, ACH (83-85% basic)</td>
</tr>
<tr>
<td><strong>Supplier</strong> TURBID PTY LTD</td>
</tr>
</tbody>
</table>

Emergency Contact Information

<table>
<thead>
<tr>
<th>Phone</th>
<th>(07) 5471 2290</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fax</td>
<td>(07) 5471 2209</td>
</tr>
<tr>
<td>Email</td>
<td><a href="mailto:info@turbid.com.au">info@turbid.com.au</a></td>
</tr>
<tr>
<td>Address</td>
<td>7/8 Grebe St, Peregian Beach QLD 4753</td>
</tr>
<tr>
<td>Poisons Information</td>
<td>Phone 13 11 26 from anywhere in Australia</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2. HAZARDS IDENTIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>STATEMENT OF HAZARDOUS NATURE</strong></td>
</tr>
</tbody>
</table>

Classified as: NOT HAZARDOUS according to the criteria of Safe Work Australia
Classified as NON-DANGEROUS GOODS by the criteria of Australian Dangerous Goods Code (ADG Code) for transport by road and rail.
Risk phrases: Not Hazardous – No criteria found
Safety phrases: S23: Do not breathe mist, S25 Avoid contact with eyes, S36 Wear suitable protective clothing
ADG Classification: None allocated. Not a Dangerous Good according to Australian Dangerous Goods (ADG) Code, IATA or IMDG/IMSBC criteria.
UN Number: None allocated
UN Number: NONE. Not hazardous.

HAZARD STATEMENT: H335: May cause respiratory irritation.

PREVENTION

P102: Keep out of reach of children.
P262: Do not get in eyes, on skin, or on clothing.
P281: Use personal protective equipment as required.

RESPONSE

P362: Take off contaminated clothing and wash before reuse.
P301+P330+P331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P302+P352: IF ON SKIN: Wash with plenty of soap and water.
P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332+P313: If skin irritation occurs: Get medical advice.
P337+P313: If eye irritation persists: Get medical advice.
**RESPONSE (cont)**

P370+P378: Not combustible. Use extinguishing media suited to burning materials.

**STORAGE**

P403+P233: Store in a well-ventilated place. Keep container tightly closed.

**DISPOSAL**

P501: If they can not be recycled, dispose of contents to an approved waste disposal plant and containers to landfill (see Section 13 of this SDS).

### 3. COMPOSITION/ INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS Number</th>
<th>Proportion</th>
<th>TWA (mg/m³)</th>
<th>STEL (mg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminium chlorohydrate ACH</td>
<td>1327-41-9</td>
<td>40 to 60%</td>
<td>2</td>
<td>Not set</td>
</tr>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>To 100%</td>
<td>Not set</td>
<td>Not set</td>
</tr>
</tbody>
</table>

This is a commercial product whose exact ratio of components may vary slightly. Minor quantities of other non-hazardous ingredients are also possible.

The SWA TWA exposure value is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. The STEL (Short Term Exposure Limit) is an exposure value that may be equalled (but should not be exceeded) for no longer than 15 minutes and should not be repeated more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The term "peak" is used when the TWA limit, because of the rapid action of the substance, should never be exceeded, even briefly.

### 4. FIRST AID MEASURES

**Eye contact:**
Flush with water for 15 minutes. Seek medical attention.

**Skin contact:**
Irritation unlikely, however if irritation does occur, flush with lukewarm, gently flowing water for 5 minutes.

**Inhalation:**
Remove from source of mist, allow patient to stabilize breathing in fresh air. If symptoms persist seek medical attention.

**Ingestion:**
Rinse mouth with water. Do not induce vomiting. If in doubt seek medical advice.

### 5. FIRE FIGHTING MEASURES

**Extinguishing media:**
Compatible with water, foam, CO2 and dry chemical. Fires can be attacked with extinguishers to suit local flammable/combustible materials.

**Flash point (°C):**
Material is non-flammable and non-combustible.

**Auto ignition point (°C):**
Not applicable.

**Explosion Limits In Air (% by volume):**
Not applicable.

**Special Procedures:**
None.

**Unusual hazards:**
None known.

**Conditions to avoid:**
None known.

**Materials to avoid:**
May emit some chlorine gas when in contact with very strong oxidizing agents; some heat liberated when in contact with strong acids.

**Decomposition products:**
Severe overheating may produce hydrogen chloride gas and aluminium oxide once water has been driven off.

**Hazardous polymerization:**
Will not occur.
### 6. ACCIDENTAL RELEASE MEASURES

**General Response:** Personnel involved in the clean-up should wear appropriate protective clothing as listed in section 2. Slippery when spilt.

**Clean Up Procedure:** Spillage into waterways will result in some lowering of the pH and the formation of aluminium hydroxide, which has a very low toxicity. Prevent drain or sewer contamination with absorbent such as sand or sawdust etc. Collect for disposal.

### 7. HANDLING & STORAGE

**Handling:** Observe good personal hygiene practices and recommended procedures. Wash thoroughly with soap and water after handling.

**Storage:** Do not store in metal containers other than stainless steel. When storing in stainless steel. Store in a cool, dry, well-ventilated area.

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<table>
<thead>
<tr>
<th>National Exposure Standards</th>
<th>None Established</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering Controls:</td>
<td>Good general ventilation should be sufficient for most conditions. Local exhaust ventilation may be necessary for some operations</td>
</tr>
<tr>
<td>Personal Protective Equipment:</td>
<td>None required</td>
</tr>
<tr>
<td>Respiratory Protection:</td>
<td>General exhaust ventilation should be adequate.</td>
</tr>
<tr>
<td>Eye Protection:</td>
<td>Safety Glasses</td>
</tr>
<tr>
<td>Skin and body protection:</td>
<td>Disposable latex gloves, overalls or apron as appropriate. Rubber boots can be used in wet conditions but mainly as protection from the water</td>
</tr>
</tbody>
</table>

### 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Appearance:</th>
<th>Clear to slightly hazy aqueous solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Odour:</td>
<td>None</td>
</tr>
<tr>
<td>Boiling point (°C):</td>
<td>100-110°C</td>
</tr>
<tr>
<td>Melting point (°C):</td>
<td>Not available</td>
</tr>
<tr>
<td>Specific Gravity (H2O = 1):</td>
<td>1.36 - 1.39 at 25°C</td>
</tr>
<tr>
<td>pH:</td>
<td>3.0 – 3.5 at 25°C</td>
</tr>
<tr>
<td>Vapour pressure (kPa):</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Relative vapour density:</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Volatile by weight (%):</td>
<td>Roughly 50 (prolonged drying leads to product change)</td>
</tr>
<tr>
<td>Solubility in water:</td>
<td>Completely miscible</td>
</tr>
<tr>
<td>Evaporation rate:</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

### 10. STABILITY AND REACTIVITY

<table>
<thead>
<tr>
<th>Chemical Stability</th>
<th>Stable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conditions to avoid:</td>
<td>Oxidizing agents may cause exothermic reactions. Keep containers tightly closed</td>
</tr>
<tr>
<td>Decomposition products:</td>
<td>Severe overheating may produce hydrogen chloride gas and aluminium oxide once water has been driven off.</td>
</tr>
<tr>
<td>Hazardous polymerization:</td>
<td>Will not occur.</td>
</tr>
</tbody>
</table>
11. TOXICOLOGICAL INFORMATION

Acute Toxicity:
Oral: LD50/oral/rat > 3311 mg/Kg
Inhalation: Product is not volatile

Irritation:
Skin: Mild skin irritant. May cause skin irritation with prolonged contact
Eyes: Irritation and redness.

Chronic Toxicity:
Threshold limit value: 2 mg/m³ based on Al (roughly 0.25 mg/m³ based on actual product (Ref.: ACGIH, soluble Aluminium salts)
Target organs: There is no data to hand indicating any particular target organs.

12. ECOLOGICAL INFORMATION

Environmental fate and distribution:
Not a persistent pollutant; can cause coagulation of solids in aqueous suspension, especially when highly diluted by the water in which the solids are suspended. Aluminium compounds are common in most soils and are the principle components of Bauxite and Gibbsite, which are common, naturally occurring minerals. When diluted by copious quantities of water (for example, to the point that the concentration is less than about 100 grams per cubic meter), this product will hydrolyze rapidly to form aluminium hydroxide, which can be expected to become a part of the natural soil profile if not recovered. When not highly diluted with water, this product may be slow to hydrolyze and may form a mixture of partially soluble aluminium species and heavy floc of aluminium hydroxide. Until further diluted, this mixture could affect marine life by clogging sensitive respiratory mechanisms in a similar fashion to muds and clays and possibly by toxic effects that are not yet well understood.

Ecotoxicity:
Whole of Effluent testing carried out on treated water leaving a New South Wales construction site’s sediment basin treated with Turbiclear in March 2017 concluded:
For the 48-hr acute toxicity test using the freshwater cladoceran Ceriodaphnia dubia the EC50 = >100% (at 100% concentration, no affect was observed)
For the 96-hr fish imbalance toxicity test using the eastern rainbowfish Melanotaenia splendida splendida the EC50 = >100% (at 100% concentration, no affect was observed)

Bioaccumulative Potential:
Does not bio accumulate.

13. DISPOSAL CONSIDERATIONS

Waste disposal method:
Refer to local waste disposal authority. This product can be neutralized with alkali to form a mixture of aluminium hydroxide and the chloride salt of the alkali. The resulting mixture is non-hazardous provided the resulting pH is between roughly 5 and 10.
14. TRANSPORT INFORMATION

This product does not carry a Dangerous Goods classification as corrosion tests have verified that it is not corrosive to either skin or to metals.

15. REGULATORY INFORMATION

This product is to be found in the public AICS database.

16. OTHER INFORMATION

This SDS was prepared in accordance with the Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals.

Acronyms:
- ADG Code Australian Code for the Transport of Dangerous Goods by Road and Rail (7th edition)
- AICS Australian Inventory of Chemical Substances
- SWA Safe Work Australia, formerly ASCC and NOHSC
- CAS Number Chemical Abstracts Service Registry Number
- Hazchem code Emergency action code of numbers and letters that provide information to emergency services especially firefighters
- IARC International Agency for Research on Cancer
- NOS Not otherwise specified
- NTP National Toxicology Program (USA)
- R-Phase Risk Phrase
- SUSMP Standard for the Uniform Scheduling of Medicines & Poisons
- Un Number United Nations Number

References cited:
3. Registry of Toxic Effects of Chemical Substances (RTECS)

Revision 9: Issued 08 Feb 2018

This SDS summarizes to our best knowledge of health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this SDS and consider the information in the context of how the product will be handled and used in the workplace including in conjunction with other products. Please contact the company if any further information is required.