

TECHNICAL BULLETIN



19 Motivation Dve Wangara, WA, 6065 AUSTRALIA
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POLYALUMINIUM CHLORIDE

POLYALUMINIUM CHLORIDE

Contains >950 g/kg Polyaluminium Chloride

WARNING

Causes skin irritation

Causes serious eye irritation

May cause respiratory irritation

Avoid breathing dust. Wear protective gloves.

IF ON SKIN: Wash with plenty of soap and water.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Call a POISON CENTER or doctor/physician if you feel unwell. If skin or eye irritation occurs: Get medical advice/attention.

**Flocculating agent
for use in water treatment**

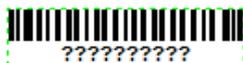
DIRECTIONS: Dose Polyaluminium Chloride into the water stream at the required dilution. pH adjustment may also be required depending on water source. After initial mixing, allow the treated water to stand without agitation. Syphon off clear supernatant liquid.

APPLICATION: The dilution rate required is best determined through testing of the water stream. A typical concentration would be 0.1 g per litre.



Contents ?????????? kg nett

Batch No: ??????????



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MATERIAL & FUNCTION

POLYALUMINIUM CHLORIDE is a slightly acidic source of aluminium used (with soda ash) as a flocculating agent for the clarification of bore water. It is sold as the powder (solid) in 25 kg bags, and in liquid form (20, 30, 40% solution).

POLYALUMINIUM CHLORIDE does not flocculate until the pH of the water has been returned to 7. This is commonly achieved with Soda Ash (Sodium Carbonate) or Pool Buffer (Sodium Bicarbonate). The flocculant gradually settles to the bottom (2-12 h), depending on the amounts used and the volume of water. The flocculant is removed by either filtration or vacuuming to waste.

POLYALUMINIUM CHLORIDE is particularly effective with iron contamination in bore water. The light green colour of the bore water commonly indicates ferrous ion which, on exposure to air, turns brown as the ferrous ion is converted to ferric ion. The brown staining on walls etc. is usually due to iron staining. Suspended solids in the water are dramatically reduced during flocculation.

APPLICATION

Typical Application Rates vary depending on the degree of contamination. The important point is that the ratio of **POLYALUMINIUM CHLORIDE** and **SODA ASH** be kept constant at about 1.3: 1.0 to ensure the pH remains about 7. If the pH is critical, then the water should be tested on a small scale first..

Volume of water	Polyaluminium Chloride	Soda Ash
L	kg	kg
1000	0.71	0.55
50 000	35	23

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100 000

71

55

Up to 10 times the level of **POLYALUMINIUM CHLORIDE** and **SODA ASH** listed above may be required for strongly coloured water.

1. Addition of **POLYALUMINIUM CHLORIDE**

Add **POLYALUMINIUM CHLORIDE** to water and allow to dissolve. The pH of the water will drop to about 4.0 but no change will be observed visually.

2. Addition of **SODA ASH**

Add **SODA ASH** portion wise until the pH returns to 7 (check with pH indicator paper or pool pH testing kit. Premixing of the **SODA ASH** in a bucket of water before adding is recommended. The water will change to a cloudy white appearance.

3. Settling and disposal

Allow the cloudy colour to settle over 2 to 12 hours (or longer if very large volumes involved. The flocculant can then be vacuumed through to waste or filtered. Backwashing of the filter will be required occasionally.

STORAGE

POLYALUMINIUM CHLORIDE may be stored for at least 12 months. Containers must be protected from moisture until required. **POLYALUMINIUM CHLORIDE** should be stored in tightly sealed plastic drums or bags. **POLYALUMINIUM CHLORIDE** will attack metal containers when moist.

PACKAGING

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25 kg bags (solid), 20L cube (20% solution).

IMPORTANT NOTICE TO CUSTOMER

*Since the use of this product is beyond the control of either seller or manufacturer, their only obligation shall be to replace any quantity of product which is proven defective. They cannot assume any risk or liability in excess of the purchase price of the product itself, which does not include labour or any consequential damages resulting from the use of this product. Determining the suitability of this product for any intended use shall be solely the responsibility of the user. **ALWAYS TEST FIRST.***