

MATERIAL SAFETY DATA SHEET

Product Name: Granular Flocculant				
1. Chemical product and company identification				
Product name	Granular Flocculant			
Chemical name	Aluminium Sulphate			
Product type and use	Swimming pools			
Company identification	Total Pool Chemicals Ltd			
Address and telephone number	Unit 1, Pool Bank Park High Street, Tarvin, Chester CH3 8JH			
Emergency telephone number	01829 740290			
2. Composition/Information on ingredients				
Chemical Name	CAS No	Content %	Symbol	R-phrase(s)
Aluminium Sulphate	10043-01-03	55	Xi	36/37/38
Water		45		
3. Hazards identification				
Main risks	May cause irritation to skin and mucous membranes			
Inhalation	May cause irritation			
Skin contact	May cause skin irritation, eg redness, eczema			
Contact with eyes	May cause irritation			
Ingestion	May cause sickness and vomiting			
Environmental risks	The product can hydrolyse and form a precipitate of metal hydroxide, when diluted beyond a particular level. The solubility of the aluminium depends on the pH value.			
4. First-aid measures				
Inhalation	Fresh air, resting			
Skin contact	Wash skin with plenty of water			
Contact with eyes	Flush with plenty of water			
Ingestion	Give water to drink. Call a physician			

Product Name: Granular Flocculant	
5. Fire-fighting measures - Suitable Specific hazards - Protective equipment	Will not burn, use media appropriate for surrounding material Thermal decomposition (> 650EC) may cause SO _x fumes Use suitable safety equipment
6. Accidental release measure Personal precautions: Environmental precautions: Methods for cleaning up: - on ground - on water	Use appropriate protective clothing Do not let product enter drains Flush with plenty of water, if possible neutralise with lime Inform police and/or fire brigade
7. Handling and Storage Storage conditions Storage stability Technical protective measures	Containers should be of acid resistant material Unlimited (in a dry place) Handle in accordance with good industrial hygiene and safety practice
8. Exposure controls/Personal Protection Engineering measures to reduce exposure Personal protective equipment - Inhalation - Skin - Eye protection TLV (US) ¹	When handling, the working area and methods should be designed to prevent direct contact with the product and inhibit dust and/or splash. Dust filter Protective clothing, rubber or plastic gloves Safety glasses with side-shields. Equipment for eye rinsing 2 mgAl/m ³
9. Physical and chemical properties Form Odour PH (conc) Boiling temperature (EC) Melting/decomposition temp (EC) Flashpoint (EC) Bulk density (kg/m ³) Solubility in water (weight %) Solubility in organic solvents Log P ^{ow}	White, granular, solid Insignificant Approx 3 in 10% (w/w) aqueous solution 110 – 120 650 None 950 – 990 Approx 45% at 20 EC None <<3

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10. Stability and Reactivity	
Conditions to avoid:	Humid conditions during storage
Materials to avoid:	Unalloyed steel
Hazardous decomposition products	Thermal decomposition (>650EC), may release SO _x fumes
11. Toxicological Information	
Oral LD ₅₀ , rat (mg/kg)	6207
Intraperitoneal LD50, mouse (mg/kg)	1735
	Dust and/or splash irritates mucous membranes, eyes and respiratory organs
12. Ecological Information	
LC50, Mosquito fish, 96 h, mg/l ²	235
	The product is an inorganic substance/preparation. During hydrolysis, a precipitate is formed of metal hydroxide in the pH range 5 to 7. Due to this reaction the pH in the water phase decreases. If phosphates are present, metal phosphate complex may form.
13. Disposal Considerations	
Waste from residues	Dilute with water, neutralise with lime
Contaminated packaging	Suitable dumping according to local regulations Destruction according to local regulations
14. Transport Information	
Transport warning label	Not regulated
ADR	Not regulated
RID	Not regulated
IMO-IMDG code	Not regulated
IATA	Not regulated
UN No	Not regulated

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15. Regulatory Information

Labelling according to EU directives

Danger symbol(s)

Xi Irritant

R-Phrase(s)

R36 Irritating to eyes

R37 Irritating to respiratory system

R38 Irritating to skin

S-Phrase(s)

S26 In the event of contact with eyes, rinse immediately with plenty of water and seek medical advice

S28 After contact with skin, wash immediately with plenty of water

S37 Wear suitable gloves made of plastic or rubber

EINECS No

233-135-0

CAS No

16828-11-8

The statements made herein are based on our best present experience and are intended to describe product safety requirements. They should not therefore be considered as a warranty of specific properties.