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SALES & SERVICES

Safety Data Sheet

1. IDENTIFICATION OF THE PRODUCT AND THE SUPPLIER

1.1 Product identifiers

Product name : Multifloc-ACH40

1.2 Other means of identification

Aluminium Chlorohydrate Solution, Aluminium Chlorhydroxide Solution, Basic Aluminium Chloride

1.3 Recommended use of the product and restrictions on use

Water Flocculant/Coagulant, Water Treatment

1.4 Details of supplier of the safety data sheet

Company	: AGent Sales & Services Pty Ltd
Street address	: 38 May Holman Drive, Bassendean, Western Australia 6054
Telephone	: (+61 8) 6270 4500
Fax	: (+61 8) 6270 4544

1.5 Emergency telephone number

Telephone : 1300 883 844

2. HAZARDS IDENTIFICATION

Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; **NON-DANGEROUS GOODS**.

This material is hazardous according to Safe Work Australia; **HAZARDOUS SUBSTANCE**.

2.1 GHS Classification

Acute Oral Toxicity	–	Category 4
Skin Irritation	–	Category 2
Eye Irritation	–	Category 2A

2.2 GHS Label elements, including precautionary statements

Pictogram :

Signal word : WARNING

Hazard statement(s)

H302	Harmful if swallowed.
H315	Causes skin irritation.
H319	Causes serious eye irritation.

Precautionary statement(s)

Prevention

P280	Wear eye protection / face protection.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.

Response

P301+P312	IF SWALLOWED: Call a POISON CENTRE or doctor/physician if you feel unwell.
P330	Rinse mouth
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P321	Specific treatment (see First Aid Measures below).
P332+P313	If skin irritation occurs: Get medical advice/attention.
P362	Take off contaminated clothing and wash before reuse.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313	If eye irritation persists: Get medical advice/attention.

Storage

No storage statements.

Disposal

P501	Dispose of contents/container in accordance with the local/regional/national/international regulations.

2.3 Other hazards

None

3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS Number	Hazard Code(s)	Concentration (%)
Aluminium Chlorohydrate	1327-41-9	H302 H315 H319	23% min. (as Al_2O_3)
Water	7732-18-5	N/A	Balance

For the full text of the H-Statements mentioned in this section, see Section 16

4. FIRST AID MEASURES

4.1 Description of First Aid measures

General advice

Contact the Poisons Information Centre (Phone: Australia 131 126; New Zealand 0800 764 766) or consult a doctor/physician. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air – avoid becoming a casualty. Remove contaminated clothing and loosen remaining clothing. Allow patient to assume most comfortable position and keep warm. If not breathing, give artificial respiration. Keep at rest until fully recovered. Consult a physician.

In case of skin contact

Immediately remove any contaminated clothing and wash skin and hair thoroughly with running water. If swelling, redness, blistering or irritation occurs seek medical advice. Consult a physician.

In case of eye contact

In case of eye contact, check for and remove any contact lenses. Immediately rinse thoroughly with plenty of running water for at least 15 minutes, keeping eyelids open. In all cases of eye contamination it is a sensible precaution to seek medical advice.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. If swallowed, give a glass of water to drink. Seek medical advice.

4.2 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

4.3 First Aid facilities

Eye wash facilities and safety shower should be available.

5. FIRE FIGHTING MEASURES

5.1 Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the chemical
Non-combustible material.

5.3 Special protective equipment and precautions for fire fighters
Decomposes on heating emitting toxic fumes, including those of hydrogen chloride and aluminium oxide. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to products of decomposition.

5.4 Hazchem code
Not applicable

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures
Use personal protective equipment. Avoid skin and eye contact. Avoid breathing vapours, dust, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. For personal protection see Section 8.

6.2 Environmental precautions
Do not let product enter drains or waterways. If contamination of sewers or waterways has occurred advise local emergency services.

6.3 Methods and materials for containment and cleaning up
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling
Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. For precautions see Section 2.2.

7.2 Conditions for safe storage, including any incompatibilities
Store in cool, dry place. Keep container tightly closed in a dry, well-ventilated place. Store away from incompatible materials described in Section 10.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

8.1 Control parameters
No value assigned for this specific material by Safe Work Australia; however, Workplace Exposure Standard(s) for constituents:

Aluminium, soluble salts (as Al): 8 hr TWA = 2 mg/m^3
As published in "*Workplace Exposure Standards for Airborne Contaminants, December 2011"* by SWA.

TWA – The time-weighted average airborne concentration of a particular substance when calculated over an eight-hour working day, for a five-day working week.

These Workplace Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These workplace exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.

8.2 Exposure controls

Appropriate engineering controls
Ensure ventilation is adequate to maintain air concentrations below Workplace Exposure Standards. Keep containers closed when not in use.

If in the handling and application of this material, safe exposure levels could be exceeded, the use of engineering controls such as local exhaust ventilation must be considered and the results documented. If achieving safe exposure levels does not require engineering controls, then a detailed and documented risk assessment using the relevant Personal Protective Equipment (PPE)

(refer to PPE section below) as a basis must be carried out to determine the minimum PPE requirements.

Personal protective equipment (PPE)
The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods and environmental factors.

Eye/face protection
Safety glasses with side shields or goggles. See Australian Standards (AS/NZS 1336 & 1337).

Skin protection
Wear protective gloves and protective clothing appropriate for the risk of exposure. See Australian Standards (AS 2161 & 2919 and AS/NZS 2210). Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use. Wash and dry hands.

Respiratory protection
If determined by a risk assessment an inhalation risk exists, wear a dust mask/respirator. See Australian Standards (AS/NZS 1715 & 1716).

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Clear to slightly cloudy liquid
Colour:	Colourless to pale yellow
Odour:	Faint characteristic
pH:	3.0 – 4.0
Melting Point:	0ºC
Boiling Point:	No data available
Flash Point:	No data applicable
Auto Ignition Temperature:	No data available
Flammability:	Non flammable
Specific Gravity:	1.33 – 1.35 g/mL @ 20ºC
Vapour Density (air=1):	No data available
Vapour Pressure:	No data available
Solubility in water:	Miscible with water

10. STABILITY AND REACTIVITY

10.1 Reactivity
Reacts with calcium hypochlorite, acids and alkalis.

10.2 Chemical stability
Stable under normal ambient, and anticipated storage and handling conditions of temperature and pressure.

10.3 Possibility of hazardous reactions
Hazardous polymerisation will not occur. Mildly corrosive to metals.

10.4 Conditions to avoid
Avoid contact with acids and alkalis.

10.5 Incompatible materials
Incompatible with strong oxidising agents, acids and alkalis.

10.6 Hazardous decomposition products
Hydrogen chloride. Oxides of aluminium.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label.

Symptoms or effects that may arise if the product is mishandled and over exposure occurs are:

Ingestion: Swallowing may result in nausea, vomiting and abdominal pain.

Eye contact: Contact with eyes will result in eye irritation.

Skin contact: Contact with skin will result in irritation.

Inhalation: Breathing in mists or aerosols may product respiratory irritation.

Acute toxicity:
LD50 Oral (rat): 681 mg/Kg

LD50 Oral (mice): 316 mg/Kg

Please note that values given above apply to constituent – POLYALUMINIUM CHLORIDE.

Chronic Effects:
No information available for the product.

11.2 Information on possible routes of exposure
The substance can be absorbed into the body by ingestion and by inhalation.

12. ECOGICAL INFORMATION

12.1 Ecotoxicity
Avoid contaminating waterways.

Quantitative data on the ecological effects of this product are not available.

Further ecologic data: The following applies to aluminium compounds in general: In the case of alkaline aluminium compounds, flocculation may cause mechanical damage in aquatic organisms.

No ecological problems are to be expected when the product is handled and used with due care and attention.

12.2 Persistence and degradability
No data available

12.3 Bioaccumulative potential
No data available

12.4 Mobility in soil
No data available

12.5 Other adverse effects
No data available

13. DISPOSAL CONSIDERATIONS

13.1 Disposal methods and containers
Ensure waste disposal conforms to relevant local, state and federal authority waste disposal regulations. All empty packaging should be disposed of as unused product.

13.3 Special precautions for landfill or incineration
Contact a specialist disposal company or the local waste regulator for advice.

14. TRANSPORT INFORMATION

Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; **NON-DANGEROUS GOODS**.

Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by Sea; **NON-DANGEROUS GOODS**.

Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by Air; **NON-DANGEROUS GOODS**.

15. REGULATORY INFORMATION

15.1 Classifications:

This material is hazardous according to Safe Work Australia; HAZARDOUS SUBSTANCE.

Acute oral toxicity	-	Category 4
Skin irritation	-	Category 2
Eye irritation	-	Category 2A

H302	-	Harmful if swallowed.
H315	-	Causes skin irritation.
H319	-	Causes serious eye irritation.

Poisons Schedule - None allocated.

All the constituents of this material are listed on the Australian Inventory of Chemical Substances (AICS).

16. OTHER INFORMATION

Key / legend to abbreviations and acronyms used in the SDS

ADG	Australian Dangerous Goods
ASCC	Australian Safety and Compensation Council
DEC	Department of Environment and Conservation
NOHSC	National Occupational Health and Safety Commission
SUSDP	Standard for the Uniform Scheduling of Drugs and Poisons
Eye Dam.	Serious eye damage
TWA	Time weighted average
STEL	Short term exposure level
SWA	Safe Work Australia
Peak Limitations	A ceiling concentration that should not be exceeded over a measurement period, which should be as short as possible, but not exceeding 15 minutes
LD_{50}	Lethal dose 50. The single dose of a substance that causes the death of 50% of an animal population from exposure to the substance by any route other than inhalation
LC_{50}	Lethal concentration that kills 50% of an animal population within a specified time
TD Lo	The lowest dose of a substance known to have produced signs of toxicity
RTECS	Registry of Toxic Effects of Chemical Substances
g/L	Grams per litre
g/cm^3	Grams per cubic centimetre
mg/m^3	Milligrams per cubic metre
mg/kg	Milligrams per kilogram
pH	Relates to hydrogen ion concentration - this value will relate to a scale of 0 - 14, where 0 is highly acidic and 14 is highly alkaline
WHS	Work Health and Safety

Literature references

"Workplace Exposure Standards for Airborne Contaminants, December 2011" by SWA
Work Health and Safety Regulations 2011

Reason(s) for Issue:

Revised primary SDS
Alignment to GHS requirements

Disclaimer

AGent Sales & Services Pty Ltd provides the information contained herein in good faith but makes no representation as to its' comprehensiveness or accuracy. A properly trained person using this product intends this document only as a guide to the appropriate precautionary handling of the material. Individuals receiving the information must exercise their independent judgement in determining its appropriateness for a particular purpose. AGent Sales & Services Pty Ltd makes no representations or warranties, either express or implied, including without limitation any warranties of merchantability, fitness for a particular purpose with respect to the information set forth herein or the product to which the information refers. Accordingly, AGent Sales & Services Pty Ltd will not be responsible for damages resulting from use of or reliance upon this information.