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SALES & SERVICES

Safety Data Sheet

1. IDENTIFICATION OF THE PRODUCT AND THE SUPPLIER

1.1 Product identifiers

Product name : POOLKING CALCIUM HARDNESS PLUS

1.2 Other means of identification

Calcium chloride, Calcium Dichloride, Calcium Chloride Mono & Dihydrate, $CaCl_2$.

1.3 Recommended use of the product and restrictions on use

Swimming pool chemical, calcium hardness increaser, water treatment.

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

1.4 Emergency telephone number

Telephone : 1300 883 844

2. HAZARDS IDENTIFICATION

2.1 GHS Classification

HAZARDOUS according to the criteria of the Globally Harmonised System (GHS) of Classification and Labelling of Chemicals.

Serious Eye Damage/Irritation (Category 2A)

GHS Label elements, including precautionary statements

Signal word : WARNING

Hazard statement(s)

H319	Causes serious eye irritation

Precautionary Statement(s)

Prevention:

P264	Wash exposed skin thoroughly after handling
P280	Wear eye protection/face protection

Response:

P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing.
P337 + P313	If eye irritation persists: Get medical advice/attention.

2.2 Other hazards
None.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS Number	Classification	Concentration (%)
Calcium Chloride	10043-52-4	H319 – Ser. Eye. Dam	➢ 99

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
Inhalation of any vapours from this product is not likely to present an acute hazard

In case of skin contact
Remove contaminated clothing and shoes. Wash affected area with soap and plenty of water. If irritation persists, seek medical attention.

In case of eye contact
Immediately flush eyes with plenty of water for 15 minutes, holding eyelids open. If irritation persists, see doctor.

If swallowed
Rinse mouth thoroughly with water immediately. Give plenty of water to drink. Do not induce vomiting. Seek medical advice if effects persist.

4.2 Most important symptoms and effects, both acute and delayed
The most important known symptoms and effects are described in Section 2.2 and/or Section 11.

4.3 Indication of any immediate medical attention and special treatment needed
Treat symptomatically.

4.4 First Aid facilities
Eye wash facilities and safety shower should be available.

5. FIRE FIGHTING MEASURES

5.1 Suitable extinguishing media
Non-flammable solid; however, if material is involved in a fire, use extinguishing media appropriate to surrounding fire conditions.

5.2 Special hazards arising from the chemical
Non-combustible solid. Negligible explosion hazard in dust form when exposed to heat or flame. Hygroscopic. Reacts violently (violent boiling) with water, generating heat. Solutions attack some metals.

5.3 Special protective equipment and precautions for fire fighters
Fire fighters should wear a positive-pressure self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots and gloves).

5.4 Hazchem code
Not applicable

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures
Wear respiratory protection. Avoid inhalation, contact with skin, eyes and clothing.
For personal protection see Section 8

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6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided. If contamination of sewers or waterways has occurred, advise local emergency services. Observe all local and national regulations.

6.3 Methods and materials for containment and cleaning up

Slippery when spilt. Avoid accidents, clean up immediately. Eliminate all sources of ignition. Contain and sweep/shovel up spills with dust binding material or use an industrial vacuum cleaner. Avoid generating dust. Transfer to a suitable, labelled container and dispose of promptly

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Ensure an eye bath and safety shower are available and ready for use.
Observe good personal hygiene practices and recommended procedures. Wash thoroughly after handling. Take precautionary measures against static discharges by bonding and grounding equipment. Avoid contact with eyes, skin and clothing. Do not inhale product dust/fumes.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, dry, well-ventilated area. Keep containers tightly closed when not in use. Inspect regularly for deficiencies such as damage or leaks. Protect against physical damage. Store away from incompatible materials as listed in Section 10.

This material is not classified as a Dangerous Goods by the criteria of the ADG.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

8.1 Control parameters - Occupational Exposure Limits

No exposure standard has been established for this product by the Australian Safety and Compensation Council (ASCC). However, the exposure standard for dust not otherwise specified:

Chemical Name	Reference	TWA – Peak Limitation		STEL		Carcinogen Category	Notices
		ppm	mg/m^3	ppm	mg/m^3		
Inspirable dust	ASCC		10			-	-
Respirable dust	ASCC		3				

As published in "*Workplace Exposure Standards for Airborne Contaminants, December 2011"* by SWA.

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.

Biological Limits
None allocated for this product.

8.2 Exposure controls

Appropriate engineering controls
Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. Ensure ventilation is adequate to maintain air concentrations below Exposure Standards. 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, splash goggles (AS/NZS 1336 & 1337).

Skin protection
Wear protective gloves (rubber or PVC), long-sleeved protective clothing and safety footwear appropriate for the risk of exposure (AS 2161 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
Where risk assessment shows air-purifying respirators are appropriate use a P1 or P2 particulate respirator when handling this product (AS/NZS 1715 & 1716).

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Form : Solid Colour : Colourless-white
Odour:	Odourless
Odour Threshold:	No data available
pH:	7.0 (typical)
Melting Point:	772 °C
Boiling Point/Range:	1670 °C
Decomposition Temperature:	No data available
Evaporation Rate:	No data available
Flash Point:	Not applicable
Flammability Limits:	Not applicable
Specific Gravity:	2.15
Vapour Density (air=1):	No data available
Vapour Pressure:	No data available
% Volatiles:	No data available
Solubility in water:	Soluble

10. STABILITY AND REACTIVITY

10.1 Reactivity
Hygroscopic

10.2 Chemical stability
Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions
Reactive with moisture. Hazardous polymerisation will not occur.

10.4 Conditions to avoid
Keep away from heat and sources of ignition. Protect from moisture. Avoid dust generation. Avoid exposure to direct sunlight.

10.5 Incompatible materials
Moisture.

10.6 Hazardous decomposition products
Hygroscopic. Reacts violently (violent boiling) with water, generating heat. Solutions attack some metals.

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity
ORAL (LD50): Acute: 1000 mg/kg [Rat] 1940 mg/kg [Mouse]. Lowest Published Lethal Dose: LDL [Rabbit] - Route: Oral; Dose: 1384 mg/kg

Skin corrosion/irritation
May cause severe irritation and possible burns, especially if skin is wet. Contact with dry skin causes mild irritation.

Serious eye damage/eye irritation
May cause severe irritation, possible transient corneal injury, and possible eye burns. Inhalation: May cause severe irritation of the upper respiratory tract with pain, inflammation and possible burns.

Respiratory or skin sensitisation
No data available

Germ cell mutagenicity
No data available

Carcinogenicity
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity
No data available.

Specific target organ toxicity (STOT) - single exposure
No data available.

Specific target organ toxicity (STOT) - repeated exposure
No data available

Aspiration hazard
No data available

Health 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 overexposure occurs are:

Eye contact : May cause irritation, redness, pain and conjunctivitis.

Skin contact : Contact may cause irritation and/or dermatitis.

Ingestion : May cause irritation and digestive discomfort. Symptoms include nausea and diarrhoea.

Inhalation : May cause mucous membrane irritation and coughing.

11.2 Information on possible routes of exposure
The substance can be absorbed into the body by inhalation of its dust, ingestion, skin and/or eye contact.

11.3 Additional Information
RTECS: Not available

12. ECOGICAL INFORMATION

12.1 Ecotoxicity
Avoid contaminating waterways.

Toxicity to fish:
(LC50): 100 mg/l 96 hours [Fish].

12.2 Persistence and degradability
Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise. The products of degradation are less toxic than the product itself.

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
Dispose of in accordance with all local, state and federal regulations. All empty packaging should be disposed of in accordance with Local, State, and Federal Regulations or recycled/reconditioned at an approved facility.

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 a Dangerous Goods by the criteria of the ADG Code for transport by road or rail
Not classified as a Dangerous Goods by the criteria of the IMDG Code for transport by sea
Not classified as a Dangerous Goods by the criteria of the IATA Code for transport by air

14.1 UN number
ADG : Not assigned **IMDG :** Not assigned **IATA :** Not assigned

14.2 Proper shipping name
ADG : CALCIUM CHLORIDE DIHYDRATE
IMDG : CALCIUM CHLORIDE DIHYDRATE
IATA : CALCIUM CHLORIDE DIHYDRATE

14.3 Transport hazard class
ADG : Not assigned **IMDG :** Not assigned **IATA :** Not assigned

14.4 Packing group
ADG : Not assigned **IMDG :** Not assigned **IATA :** Not assigned

14.5 Environmental hazards
ADG : No **IMDG Marine Pollutant :** No **IATA :** No

14.6 Special precautions for users No data

14.7 Hazchem code
ADG : Not assigned **IMDG EMS :** Not assigned

14.8 Dangerous goods initial emergency response guide (SAA/SNZ HB76:2010) Not assigned

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations

Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP)
Not listed

Carcinogen classification under WHS Regulations 2011, Schedule 10
Not listed

Notification status
AICS On the inventory, or in compliance with the inventory.

16. OTHER INFORMATION

Key / legend to abbreviations and acronyms used in the MSDS

ADG	Australian Dangerous Goods
ASCC	Australian Safety and Compensation Council
DEC	Department of Environment and Conservation
GHS	Globally Harmonised System of Classification & Labelling of Chemicals
NOHSC	National Occupational Health and Safety Commission
RTECS	Registry of Toxic Effects of Chemical Substances.
SUSDP	Standard for the Uniform Scheduling of Drugs and Poisons
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
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

"Registry of Toxic Effects of Chemical Substances". Ed. D. Sweet, US Dept. of Health & Human Services: Cincinatti, 2012.

Reason(s) for Issue:

Revised primary SDS
Alignment to GHS requirements

Disclaimer