PRODUCT NAME **ACTI-Mag™**

1. IDENTIFICATION: PRODUCT IDENTIFIER AND CHEMICAL IDENTITY

Product Identifier	ACTI-Mag
Other means of identification	Magnesium Hydroxide Liquid
Recommended use of chemical & restrictions on use	Water neutralisation, odour control, acid neutralisation, heavy metal scale inhibitor
Manufacturer	Calix Limited Level 1, 9 Bridge Street, Pymble NSW 2073, AUSTRALIA
Emergency Telephone Fax Email	(02) 8199 7400 (02) 8199 7444 info@calix.global

2. HAZARD(S) IDENTIFICATION

GHS Hazardous classification of the substance	None Allocated
Signal Word(s)	None
Hazard Statement (s)	None
Pictogram (s)	None
Precautionary Statement	P260 Do not breath dust P262 Do not get in eyes, on skin or on clothing P281 Use personal protection as required
Precautionary Statement -response	P304 - If inhaled, remove victim to fresh air 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. P302 + P352 If on skin, wash with plenty of soap and water
Precautionary Statement -storage	P402 Store in a dry place P410 Protect from sunlight P233 Keep container tightly closed
Precautionary Statement -disposal	P501 Small amounts of material can be disposed of in usual waste stream. However, large amounts of product may be dried and disposed of in regular solids waste stream

3. COMPOSITION AND INFORMATION ON INGREDIENTS

Ingredient	CAS No.	Content	Risk Phrases
Magnesium hydroxide	1309-42-8	>55%	-
Water	7732-18-5	<45%	-
Crystalline Silica(quartz)	14808-60-7	<1%	R48/20, Carc. Cat. 1 R49

4. FIRST AID MEASURES

Eye	If in eyes, hold eyelids apart and flush continuously with running water. Continue flushing until advised to stop by, a doctor.
Inhalation	If inhaled, remove from contaminated area.
Skin	If skin or hair contact occurs, remove contaminated clothing and flush skin and hair with running water. Continue flushing with water until advised to stop by a doctor.
Ingestion	For advice, immediately contact a doctor.
Advice to Doctor	Treat symptomatically.
First Aid Facilities	Check for eye wash facilities before handling. Personal protective equipment (PPE) for first aiders is recommended.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media	Use appropriate fire extinguisher for surrounding environment.
Hazards from Combustion	Non-combustible material
Precautions in connection with Fire	Non-combustible material. Magnesium hydroxide is a commonly used flame retardant and would normally be expected to suppress the heat of a surrounding fire.

6. ACCIDENTAL RELEASE MEASURES

Emergency Procedures	Evacuate all unprotected personnel from area. Wear personal protective equipment to prevent skin and eye contact and inhalation of dusts. Product is slippery when spilt. Clean up any spills immediately they occur

7. STORAGE AND HANDLING

Precautions for Safe Handling	Avoid spills, eye contact, ingestion, inhalation and repeated or prolonged skin contact. Wash hands after use.
Conditions for Safe Storage	Store product in a cool & dry place out of direct sunlight. Store away from incompatible materials described in Section 10. Keep containers closed when not in use and check storage method regularly for leaks or potential for discharge

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

National Exposure Standards	No exposure value assigned for this specific material by Safe Work, Australia. However, the available exposure limits for ingredients are listed below:
Exposure Standards	Silica Crystalline - Quartz: 8hr TWA = 0.1 mg/m3 As published by Safe Work Australia. TWA - The time-weighted average airborne concentration over an eight-hour working day, for a five-day working week over an entire working life.
Biological Limit	No biological limit allocated.
Engineering Controls	Provide sufficient ventilation to keep airborne levels below the exposure limits. Where dust is generated, particularly in enclosed areas, and natural ventilation is inadequate, a local exhaust ventilation system is required. If engineering controls are not effective in controlling airborne exposure then an approved respirator with a replaceable dust/particulate filer should be used.
Eye Protection	Safety glasses as appropriate should be used.
Hand Protection	Wear gloves of impervious material.
Body Protection	Suitable protective work wear, e.g. long sleeve shirts and pants to avoid skin contact is recommended

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Liquid
Colour:	Off white- light pink
Odour:	Odourless
Solubility:	Dispersible in water
Specific Gravity (kg/m3):	1.45 - 1.55
Relative Vapour Density (air=1):	Not available
Vapour Pressure (20 °C):	Not available
Flash Point (°C):	Not available
Flammability Limits (%):	Not available
Auto ignition Temperature (°C):	Not available
% Volatile by Weight:	<40 (water)
Boiling Point/Range (°C):	Not available
Decomposition Point (°C):	350
pH:	9 – 10

10. STABILITY AND REACTIVITY

Chemical Stability	Chemically stable under recommended conditions of storage. Material will become thick with age if stored without agitation, shake or mix container before use.
Condition to Avoid	Extreme of temperature and direct sunlight. Dust accumulation.
Incompatible materials	Incompatible with acids
Hazardous Reactions	Polymerization will not occur. Reacts with acid

11. TOXICOLOGICAL INFORMATION

Toxicity	Low toxicity- irritant. LD 50 oral rat: >2000mg/kg LC 50 inhalation/4hr/rat: >2.1mg/L
Eye	Irritant. Contact may result in irritation, lacrimation, pain and redness.
Inhalation	Irritant. Breathing in dust may produce respiratory irritation.
Skin	Irritant. Contact may result in irritation, redness, rash and dermatitis.
Ingestion	Low toxicity. Ingestion may result in gastrointestinal irritation nausea, vomiting, abdominal pain and diarrhoea.

12. ECOLOGICAL INFORMATION

Aquatic toxicity;	
Algae	EC50 (72h): >100 mg/l
Daphnia	LC 50 (96h): 170.86 mg/l fresh water
Fish	LC 50 (96h): 776 mg/l fresh water

13. DISPOSAL CONSIDERATIONS

Waste Disposal Method:
Small amounts of material can be disposed of in usual waste stream. However, large amounts of product may be dried and disposed of in regular solids waste stream.

Container Handling and Disposal:
When containers are empty, residue can be washed out and the containers disposed of via general recycling stream. If the contents of the container are left to dry out, the residual product can be emptied from the container (may need to be soaked in water for a day or two) and disposed of to a usual waste stream, while the containers are disposed of via general recycling stream.

14. TRANSPORT INFORMATION

Road and Rail Transport (ADG)
Not classified as a Dangerous Good according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code) for transport by road and rail.

Marine Transport (IMO/IMDG)
Not classified as a Dangerous Good according to the International Maritime Organization Rules (Maritime Dangerous Goods Code - IMDG Code) for transport by sea.

Air Transport (ICAO-IATA):
Not classified as a Dangerous Good according to the International Civil Aviation Organization (ICAO) and International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air. Note: May vary from country to country.

15. REGULATORY INFORMATION

Poison Schedule	A poison schedule number has not been allocated to this product using the criteria in the Standard for the Uniform. Scheduling of Medicine and Poisons (SUSMP).
AICS	All components of this product are listed on the Australian Inventory of Chemical Substances (AICS).

16. ANY OTHER RELEVANT INFORMATION

Report Status	This document has been compiled by Calix. This SDS is summarised to our best knowledge at the date of issue and the appropriate safety and handling precautions for the product at the time of issue. Further clarification regarding any aspect of the product should be obtained directly from Calix. While Calix has taken all due care to include accurate and up-to-date information in this SDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, Calix accepts no liability for any loss, injury or damage (including consequential loss) which may be suffered or incurred by any person as a consequence of their reliance on the information contained in this SDS.
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