



Material Safety Data Sheet



Boral Australian Gypsum Limited
A.C.N. 004 231 976
676 Lorimer Street,
Port Melbourne, Vic. 3207
Telephone (03) 9214 2138
Facsimile (03) 9646 7339

Product Name DENTAL PLASTER (BORAL)

1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Supplier Name BORAL AUSTRALIAN GYPSUM LIMITED
Address 676 Lorimer Street, Port Melbourne, Victoria, AUSTRALIA, 3207
Telephone (03) 9214 2138
Fax (03) 9646 1912
Emergency 1800 033 111
Synonym(s) BORAL DENTAL PLASTER • P 005 - MANUFACTURER'S CODE
Use(s) CASTING AGENT • DENTAL - PLASTER • MOULDING COMPOUND
MSDS Date 01 May 2008

2. HAZARDS IDENTIFICATION

NOT CLASSIFIED AS HAZARDOUS ACCORDING TO ASCC CRITERIA

NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE

UN No.	None Allocated	DG Class	None Allocated	Subsidiary Risk(s)	None Allocated
Packing Group	None Allocated	Hazchem Code	None Allocated	EPG	None Allocated

3. COMPOSITION/ INFORMATION ON INGREDIENTS

Ingredient	Formula	CAS No.	Content
SILICA, CRYSTALLINE - QUARTZ	Si-O2	14808-60-7	<0.1%
CALCIUM SULPHATE HEMIHYDRATE	Ca-O4-S.1/2-H2-O	10034-76-1	>60%
CALCIUM CARBONATE	Ca-C-O3	471-34-1	<10%
POTASSIUM SULPHATE	K2-S-O4	7778-80-5	<2%

4. FIRST AID MEASURES

Eye If in eyes, hold eyelids apart and flush the eye continuously with running water. Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.

Inhalation If inhaled, remove from contaminated area. Apply artificial respiration if not breathing.

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 the Poisons Information Centre or a doctor.

Ingestion For advice, contact a Poisons Information Centre on 13 11 26 (Australia Wide) or a doctor (at once). If swallowed, do not induce vomiting.

Advice to Doctor Drinking glycerin, gelatin solutions, or large volumes of water may delay the hardening of this product in the stomach. Surgical relief of obstruction, particularly at the phlorus, may be required. The manufacturer recommends treating the patient symptomatically.

5. FIRE FIGHTING MEASURES

Flammability	Non flammable. May evolve toxic gases (sulphur oxides) when heated to decomposition.
Fire and Explosion	Evacuate area and contact emergency services. Toxic gases may be evolved in a fire situation. Remain upwind and notify those downwind of hazard. Wear full protective equipment including Self Contained Breathing Apparatus (SCBA) when combating fire. Use waterfog to cool intact containers and nearby storage areas.
Extinguishing	Prevent contamination of drains or waterways.
Hazchem Code	None Allocated

6. ACCIDENTAL RELEASE MEASURES

Spillage	If spilt (bulk), use personal protective equipment. Moisten with water to prevent a dust hazard and place in sealable containers for disposal.
-----------------	--

7. STORAGE AND HANDLING

Storage	Store in cool, dry, well ventilated area, removed from aluminium, diazomethane, phosphorus and foodstuffs. Ensure containers/ packages are adequately labelled, protected from physical damage and sealed when not in use. WARNING - DO NOT attempt to make an enclosed cast of any body parts such as hands or fingers. This product gives off heat when mixed with water for setting, which may result in serious skin burns if used for casting body parts. If this product is repackaged by distributors or others, this warning must be repeated on any new packaging.
Handling	Before use carefully read the product label. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands before eating. Prohibit eating, drinking and smoking in contaminated areas.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

Exposure Stds	Ingredient	Reference	TWA		STEL	
			ppm	mg/m3	ppm	mg/m3
	Calcium carbonate	ASCC (AUS)	--	10	--	--
	Silica, Crystalline Quartz	ASCC (AUS)	--	0.1	--	--

Biological Limits No biological limit allocated.

Engineering Controls Avoid inhalation. Use in well ventilated areas. Where an inhalation risk exists, mechanical extraction ventilation is recommended. Avoid inhalation. Maintain dust levels below the recommended exposure standard.

PPE Wear dust-proof goggles and PVC or rubber gloves. When using large quantities or where heavy contamination is likely, wear: coveralls. Where an inhalation risk exists, wear: a Class P1 (Particulate) respirator.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance	WHITE POWDER	Solubility (Water)	0.2 %
Odour	SLIGHT ODOUR	Specific Gravity	2.6 - 2.7
pH	NOT AVAILABLE	% Volatiles	NOT AVAILABLE
Vapour Pressure	NOT AVAILABLE	Flammability	NON FLAMMABLE
Vapour Density	NOT AVAILABLE	Flash Point	NOT RELEVANT
Boiling Point	NOT AVAILABLE	Upper Explosion Limit	NOT RELEVANT
Melting Point	NOT AVAILABLE	Lower Explosion Limit	NOT RELEVANT
Evaporation Rate	NOT AVAILABLE		

10. STABILITY AND REACTIVITY

Chemical Stability	Stable under recommended conditions of storage.
Conditions to Avoid	Avoid heat, sparks, open flames and other ignition sources.
Material to Avoid	Incompatible with aluminium (when heated), diazomethane, phosphorus (at high temperatures) and oxidising agents.
Hazardous Decomposition Products	
Hazardous Reactions	Polymerization will not occur.

11. TOXICOLOGICAL INFORMATION

Health Hazard Summary	Low toxicity - irritant. Use safe work practices to avoid dust generation or inhalation. Crystalline silica is classified as carcinogenic to humans (IARC Group 1). Chronic exposure to crystalline silica may cause lung fibrosis (silicosis), however due to the low levels of crystalline silica in this product, chronic health effects are not anticipated with normal use.
Eye	Irritant. Contact may result in irritation, lacrimation, pain and redness.
Inhalation	Irritant. Over exposure may result in irritation of the nose and throat, with coughing.
Skin	Irritant. Contact may result in irritation, redness, itching, pain and rash.
Ingestion	Low toxicity. Ingestion may result in gastrointestinal irritation, nausea, vomiting, headache and diarrhoea.
Toxicity Data	SILICA, CRYSTALLINE - QUARTZ (14808-60-7) LCLo (Inhalation): 300 ug/m3/10 years (human) LDLo (Intratracheal): 200 mg/kg (rat) LDLo (Intravenous): 20 mg/kg (dog) TCLo (Inhalation): 16 000 000 particles/ft3/8 hours/17.9 years (human-fibrosis) CALCIUM CARBONATE (471-34-1) LD50 (Ingestion): 6450 mg/kg (rat) POTASSIUM SULPHATE (7778-80-5) LD50 (Ingestion): 6600 mg/kg (rat) LDLo (Ingestion): 750 mg/kg (woman) LDLo (Subcutaneous): 3000 mg/kg (guinea pig) TDLo (Ingestion): 750 mg/kg (woman)

12. ECOLOGICAL INFORMATION

Environment	The main component/s of this product are not anticipated to cause any adverse effects to plants or animals.
--------------------	---

13. DISPOSAL CONSIDERATIONS

Waste Disposal	Reuse where possible. No special precautions are required for this product.
Legislation	Dispose of in accordance with relevant local legislation.

14. TRANSPORT INFORMATION

NOT CLASSIFIED AS A DANGEROUS GOOD BY THE CRITERIA OF THE ADG CODE

Shipping Name	None Allocated				
UN No.	None Allocated	DG Class	None Allocated	Subsidiary Risk(s)	None Allocated
Packing Group	None Allocated	Hazchem Code	None Allocated	EPG	None Allocated

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 Drugs and Poisons (SUSDP).
AICS	All chemicals listed on the Australian Inventory of Chemical Substances (AICS).

16. OTHER INFORMATION

Additional Information	EXPOSURE STANDARDS - TIME WEIGHTED AVERAGES: Exposure standards are established on the premise of an 8 hour work period of normal intensity, under normal climatic conditions and where a 16 hour break between shifts exists to enable the body to eliminate absorbed contaminants. In the following circumstances, exposure standards must be reduced: strenuous work conditions; hot, humid climates; high altitude conditions; extended
-------------------------------	---

DENTAL PLASTER (BORAL)

shifts (which increase the exposure period and shorten the period of recuperation).

ABBREVIATIONS:

ADB - Air-Dry Basis.

BEI - Biological Exposure Indice(s)

CAS# - Chemical Abstract Service number - used to uniquely identify chemical compounds.

CNS - Central Nervous System.

EINECS - European INventory of Existing Commercial chemical Substances.

IARC - International Agency for Research on Cancer.

M - moles per litre, a unit of concentration.

mg/m3 - Milligrams per cubic metre.

NOS - Not Otherwise Specified.

NTP - National Toxicology Program.

OSHA - Occupational Safety and Health Administration.

pH - relates to hydrogen ion concentration using a scale of 0 (high acidic) to 14 (highly alkaline).

ppm - Parts Per Million.

RTECS - Registry of Toxic Effects of Chemical Substances.

TWA/ES - Time Weighted Average or Exposure Standard.

HEALTH EFFECTS FROM EXPOSURE:

It should be noted that the effects from exposure to this product will depend on several factors including: frequency and duration of use; quantity used; effectiveness of control measures; protective equipment used and method of application. Given that it is impractical to prepare a Chem Alert report which would encompass all possible scenarios, it is anticipated that users will assess the risks and apply control methods where appropriate.

PERSONAL PROTECTIVE EQUIPMENT GUIDELINES:

The recommendation for protective equipment contained within this Chem Alert report is provided as a guide only. Factors such as method of application, working environment, quantity used, product concentration and the availability of engineering controls should be considered before final selection of personal protective equipment is made.

Report Status

This document has been compiled by RMT on behalf of the manufacturer of the product and serves as the manufacturer's Material Safety Data Sheet ('MSDS').

It is based on information concerning the product which has been provided to RMT by the manufacturer or obtained from third party sources and is believed to represent the current state of knowledge as to 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 the manufacturer.

While RMT has taken all due care to include accurate and up-to-date information in this MSDS, it does not provide any warranty as to accuracy or completeness. As far as lawfully possible, RMT 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 MSDS.

Prepared By

Risk Management Technologies
5 Ventnor Ave, West Perth
Western Australia 6005
Phone: +61 8 9322 1711
Fax: +61 8 9322 1794
Email: info@rmt.com.au
Web: www.rmt.com.au

MSDS Date: 01 May 2008

End of Report