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PRODUCT CODE: 404  
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## **Technical Data Sheet**

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### **Maxibond 1 Geelong**

A selected blend of Australian Bentonite

#### **FUNCTIONAL USE:**

Provides green compression strengths so that accurate, dense stable moulds can be produced consistently from silica sand.

High hot compression strength ensures mould stability and casting accuracy during and after pouring. High durability characteristics

General purpose filler and extender for use when mild thixotropic properties,

#### **PURITY:**

Hydrous aluminium silicate comprised principally of the clay mineral montmorillonite, Montmorillonite content 94% minimum.

#### **CHEMICAL COMPOSITION:**

Typical Analysis (moisture free)

<b>Oxide</b>	<b>wt. % norm</b>	<b>Oxide</b>	<b>wt. % norm</b>
SiO <sub>2</sub>	67.72%	K <sub>2</sub> O	1.15%
Al <sub>2</sub> O <sub>3</sub>	20.54%	MgO	2.27%
CaO	0.64%	MnO	0.02%
Cl	0.21%	Na <sub>2</sub> O	2.96%
Cr <sub>2</sub> O <sub>3</sub>	0.06%	P <sub>2</sub> O <sub>5</sub>	0.03%
Fe <sub>2</sub> O <sub>3</sub>	3.52%	SO <sub>3</sub>	0.02%
		TiO <sub>2</sub>	0.87%
<b>TOTAL</b>	<b>100%</b>		

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#### **CHEMICAL FORMULA**

*A tri-layer expanding mineral structure of approximately:  
(Al, Fe<sub>1.67</sub>, Mg<sub>0.33</sub>)Si<sub>4</sub>O<sub>10</sub>(OH)<sub>2</sub> Na<sup>+</sup> Ca<sup>++</sup><sub>0.33</sub>*

#### **Typical Physical Properties**

Bulk Density (tonnes / m <sup>3</sup> )	Approx 0.9
Moisture	Max 13%
pH (6.25% solids)	7 to 10
CEC (meq / 100g)	> 75
Dry Particle size	Max 40% passing 0.076mm
Free Swell	>20

#### **SAND PROPERTIES:**

FOUNDRY BOND TEST – 45% CONSTANT COMPACTABILITY METHOD

Silica sand      93 parts by weight

Maxibond 1      7 parts by weight

A.F.S. Green Compression      > 13 psi

A.F.S. Dry Compression      > 30 psi

#### **PACKAGING:**

Multi-wall paper bags, Bulker bags & Bulk Tankers