



A.B.N. 37 004 377 155

[www.amcol.com](http://www.amcol.com)

50 Crowle Street, North Geelong, VIC 3215  
PO Box 380, North Geelong, VIC 3215  
Tel: +61 3 5278 2555 / Fax: +61 3 5278 5833

95 Balham Rd, Archerfield, QLD 4108  
PO Box 87, Archerfield, QLD 4108  
Tel: +61 7 3277 9563

PRODUCT CODE: 504  
ISSUE DATE: April 2014

## Technical Data Sheet

### Maxibond 1: Bentonite for Greensand Foundry Applications

#### FUNCTIONAL USE

- Good green compression strengths for production of accurate, dense stable moulds from silica sand.
- High hot compression strength ensures mould stability and casting accuracy during and after pouring.
- High thermal durability, resulting in reduced bentonite consumption.

#### PRODUCT DESCRIPTION

Sodium bentonite blend consisting predominantly of montmorillonite. Accessory minerals include feldspar, quartz and kaolinite.

#### CHEMICAL COMPOSITION (Typical Analysis)

Oxide	%	Oxide	%
SiO <sub>2</sub>	57.6	MnO	0.02
Al <sub>2</sub> O <sub>3</sub>	17.25	Na <sub>2</sub> O	2.35
CaO	0.74	P <sub>2</sub> O <sub>5</sub>	0.02
Cl	0.18	SO <sub>3</sub>	0.04
Cr <sub>2</sub> O <sub>3</sub>	0.03	TiO <sub>2</sub>	0.67
Fe <sub>2</sub> O <sub>3</sub>	2.90	LOI	3.80
K <sub>2</sub> O	0.84	Moisture	11.54
MgO	2.04	Total	100.00

#### TYPICAL PHYSICAL PROPERTIES

Property	Measurement
Bulk Density	~ 0.9 t / m <sup>3</sup>
Moisture	< 13%
pH (6.25% solids)	~ 9
CEC	> 75 meq /100g
Free Swell	> 20 ml / 2g
Dry Particle Size	> 55% < 0.076 mm

#### 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 Strength > 13 psi. A.F.S. Dry Compression Strength > 30 psi

#### PACKAGING

Multi-wall paper bags, Bulker bags & Bulk Tankers