



# TECHNICAL DATA SHEET

Product Group: **BENTONITE**  
 Product: **ECCAGEL OCMA**

## DESCRIPTION

A sodium bentonite with high bonding properties when mixed with sand, and good swelling, gelling properties. It has a very good cationic exchange capacity. All bentonite is mined in the Heidelberg (WC) area.

## MINERALOGICAL CONSTITUENTS. (approximate)

Montmorillonite: 94%  
 Quartz : 5,5%  
 Mica: 0,5%

## TYPICAL CHEMICAL ANALYSIS

SiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	Fe <sub>2</sub> O <sub>3</sub>	TiO <sub>2</sub>	CaO	MgO	K <sub>2</sub> O	Na <sub>2</sub> O	L.O.I.
62,2	18,6	3,5	0,2	0,8	3,7	0,7	2,4	7,9

## PHYSICAL PROPERTIES (Typical)

Colour (crude):	Grey - Fawn.
Odour:	None
Appearance:	Powder.
Moisture:	8-12% (typical)
Specific gravity:	2,51 g/cm <sup>3</sup> .
Bulk Density:	1,1 g/cm <sup>3</sup> .
Particle size distribution:	<5% retained on 150 µm.
Grit:	<2.5% retained on 75 µm.
pH ( 30g in 60ml water ):	9-10.
Swelling index:	> 30 ml/2g
Water Absorption:	663.1 ( on sinter plate )
Cation Exchange Capacity:	78.6 meq / 100g.
Viscosity (s) after 1 hour based 35g/1000ml	40 seconds minimum
Viscosity (s) after 24 hours based 35g/1000ml	43 seconds minimum

**DRILLING PROPERTIES:  
(Typical)**

Filter Volume (ml)	<16
Viscosity: 600 rpm (cP)	>30
Plastic Viscosity (cP)	7
Yield Point (m <sup>3</sup> /tonne)	21
Yield Point / Plastic Viscosity (ratio)	3.0

**HEALTH AND SAFETY**

Eccagel OCMA is a milled alumino silicate product which generates dust when handled in dry conditions. Eccagel OCMA is low in dust likely to yield respirable silica levels. A dust mask is recommended for use when handling this product in bulk volumes. The material is a natural desiccant. Handling with gloves or the use of a barrier cream will prevent drying of the skin. The product is very slippery when wet and special care must be taken during handling in wet conditions.

**PACKAGING**

Eccagel OCMA is available in the following packaging:

- 40 kg multiply bags, 25 bags per 1,0 metric ton pallet.

**STORAGE**

Bentonite is hygroscopic and absorbs moisture. Store in a cool dry place. Do not leave bags in use open; i.e. fold in tight preventing ingress of moisture.  
Shelf life is 10 years.

DATA ARE TYPICAL OF OUR NORMAL PRODUCTION AND ARE SUBJECT TO NORMAL VARIATION, THEY SHOULD NOT BE TAKEN AS A BINDING SPECIFICATION. WHERE A PROPERTY IS CRITICAL, CONFIRMATION SHOULD BE OBTAINED FROM ECCA HOLDINGS (PTY) LTD.

Date: November 2009

Approval Signature: \_\_\_\_\_  
(Mine Manager)

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