

## TECHNICAL DATA SHEET

### PRODUCT TYPE

**ThermECO** Low Temperature Sanitaryware Oncefire Body

### APPEARANCE

Brown / Buff plastic clay.

### PRODUCT PROFILE

Unfired, ceramic body in press-cake form; designed for oncefire sanitaryware. These products have been designed to offset rising industry energy prices by reducing the peak firing temperature and thereby the total energy consumption during sanitaryware firing cycles.

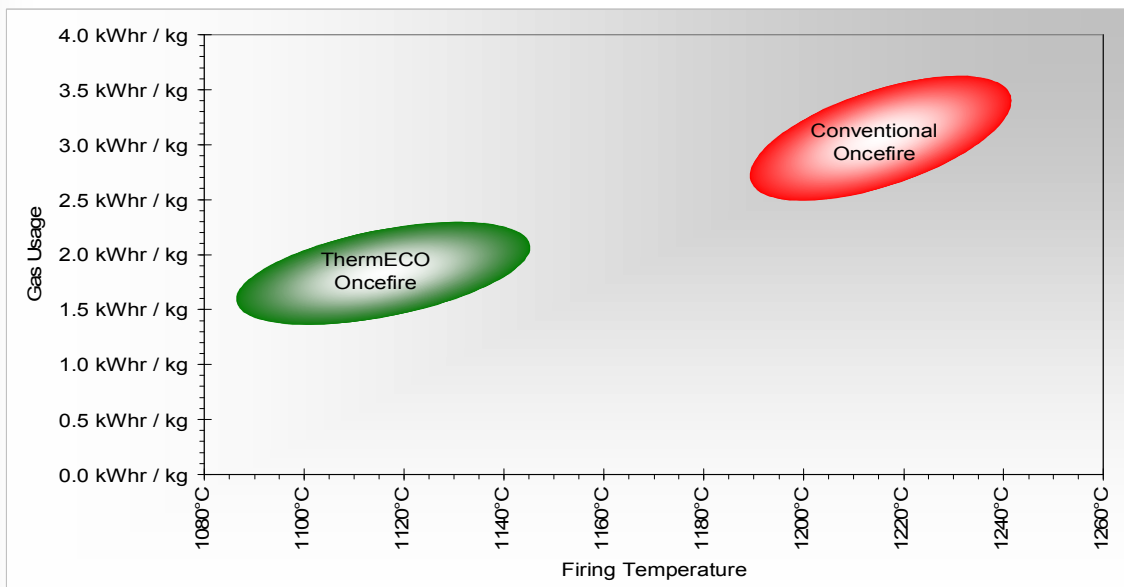
These products are part of Endeka Ceramic's energy saving **ThermECO** range.

### 1) PROPERTY

### PRODUCT DETAIL

#### 1.1 Firing Conditions

These products have been designed to mature through a range of firing conditions. Dependent on the kiln conditions and the exact product formulation chosen, the anticipated firing range of these products is 1080°C - 1130°C (or green bullers ring values 17 – 24).



## TECHNICAL DATA SHEET

- 1.2 Compatibility** The products are compatible with Endeka Ceramic's **ThermECO** range of low-temperature sanitaryware once-fire and re-fire glazes.
- 1.3 Water Absorption** <0.5 % on firing 17 to 23 BR with a soak of 1 hour.
- 1.4 Dry to Fired Contraction** 8-11% on firing to 17 to 23 BR with a soak of 1 hour.
- 1.5 Thermal expansion** 0.325 – 0.350 % at 500°C
- 1.6 Green (unfired) MOR** 600-700 lbs/in<sup>2</sup> (40-50 kg/cm<sup>2</sup>) on testing in accordance to Johnson Matthey test procedure J17.26
- 1.7 Fired Strength** >12,000 psi (>840 kg/cm<sup>2</sup>)
- 1.7 Specific Gravity** 2.64
- 1.8 Moisture Content** 16 – 22% by weight (presscake)
- 1.9 Fired Chemical analysis**
- SiO<sub>2</sub>: 70 – 85  
Al<sub>2</sub>O<sub>3</sub>: 10 – 20  
MO: 0 – 2  
M<sub>2</sub>O: 3 – 6  
Fe<sub>2</sub>O<sub>3</sub>: <0.4  
TiO<sub>2</sub>: <0.4
- 1.10 Recommended Slip Rheology** Slip Density – 1.80 kgs/l  
Torsion viscometer fluidity – 300° (11/16" bob. 30 s.w.g.)  
Thixotropy (60 secs) – 25-30°

## TECHNICAL DATA SHEET

### 1.11 Storage

It is recommended that this product is stored between 5 - 25°C in its original pack form. Avoid exposure to excessive heat or frost.

### 1.13 Further Information

For further technical information or to obtain a Materials Safety Data Sheet (MSDS), please contact the Endeka Ceramics' Sales team.



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**Certificate Number: FM518117**