

## TECHNICAL DATA SHEET

### PRODUCT TYPE

**ThermECO** Low Temperature Sanitaryware Oncefire Glazes

### APPEARANCE

Buff-coloured, ground glaze supplied as an aqueous suspension or as a moist, easily-dispersed powder.

### PRODUCT PROFILE

Leadless, lower firing, fully opaque, oncefire glazes for use on 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.

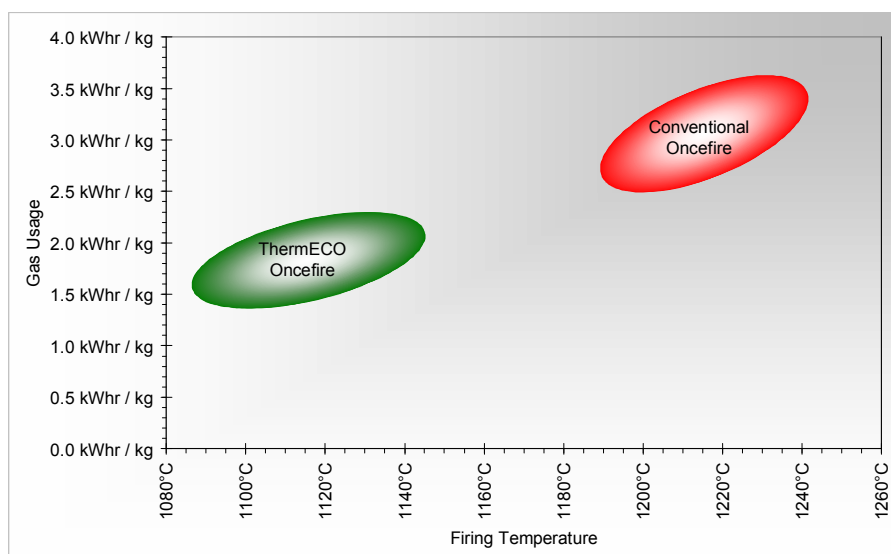
These products are part of Endeka Ceramic's energy saving **ThermECO** range.

## 1) PROPERTY

## PRODUCT DETAIL

### 1.1 Firing Conditions

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



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- 1.2 Compatibility** The products are compatible with Endeka Ceramic's **ThermECO** range of low-temperature sanitaryware bodies and refire glazes.
- 1.3 Fired appearance** These products afford a piece a high-quality gloss finish.
- 1.4 Colour** These lower-firing glaze systems can be colour modified to match most of the traditional Sanitaryware colours, using Datacolor colour tools software and Endeka Ceramic's fully trained technicians.  
The glazes are compatible with most types of traditional ceramic stains and pigments; giving excellent colour development.
- 1.5 BS test data** These products pass the BS3402 test procedure for chemical and stain resistance for sanitaryware.
- 1.6 Rheology** Products are available with a range of different rheologies, which can be individually designed to meet specific application requirements.
- 1.7 Chemical Composition** The products are lead-free. Typical fired analyses are within the following ranges:  
Al<sub>2</sub>O<sub>3</sub>: 9 – 13, B<sub>2</sub>O<sub>3</sub>: 0 – 5, SiO<sub>2</sub>: 55 – 60, ZnO: 0 – 4  
ZrO<sub>2</sub>: 0 – 12, RO: 7 – 11, R<sub>2</sub>O: 5 – 8
- 1.8 PSD range** 72-84 % < 14µm
- 1.9 TE range** 0.260 – 0.295% at 500°C
- 1.10 Mode of supply** The products can be supplied:  
✓ in slop form in 200kg drums, 1 tonne IBC or by tanker  
✓ dry readymix glaze in 25kg bags (typical moisture content <9wt%)
- 1.11 Fusibility/Viscous Flow** The products are closely controlled for glass fusibility and viscous flow properties, to ensure a consistent uniform performance is maintained batch to batch.

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### 1.12 Screening and magnetting

The finished glaze is subject to fine screening (0.112mm nominal aperture mesh) and high-powered (10,500 gauss) rare earth magnetic separation.

### 1.13 Further Information

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



**ISO 9001 - 2008 Registered Firm**  
**Certificate Number: FM518117**