
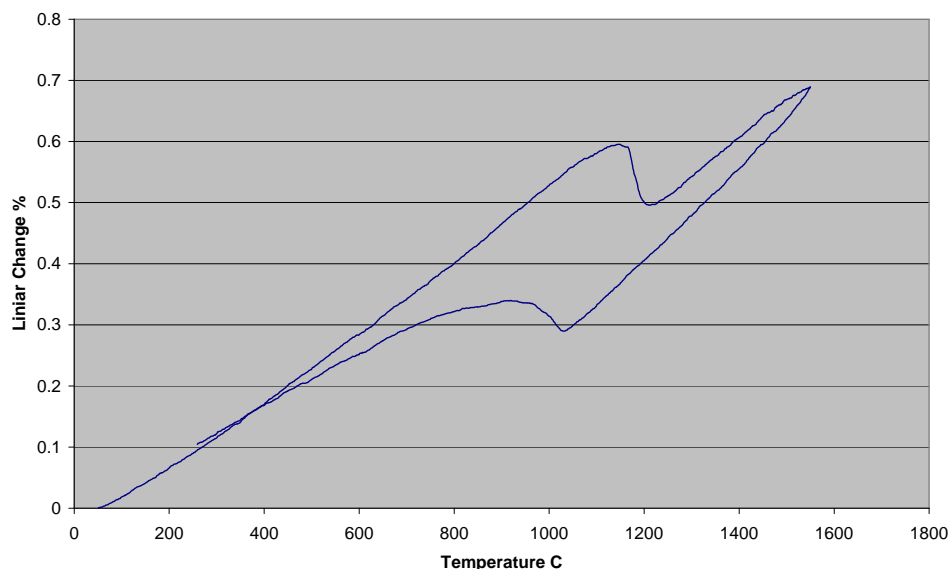


**Emhart Glass 300 - Material Technical Data Sheet**

|  |   |   |                                    |             |
|--|---|---|------------------------------------|-------------|
| <b>Mix ID:</b>   | <b>300</b>  |   |                                    |             |
| <b>Mix Name:</b>   | <b>Phoenix VC-77</b>  |   |                                    |             |
| <b>Type:</b>   | <b>Cast</b>   |   |                                    |             |
| <b>Application:</b>  | Induction melting crucibles, transition ceramics in pressure pouring, tubes, mandrels for Danner tubing process, glass house pots and expendables, snorkels for continuous casters. For applications where heat shock is severe. Excellent resistance to glass corrosion. |   |                                    |             |
| <b>Typicals:</b>   | <b>Porosity:</b>  | <b>23%</b>                              | <b>Chemistry:</b>                  | <b>Wt.%</b> |
|  <p>REFRACTORY<br/>PRODUCTS</p> | <b>Bulk Density:</b>  | <b>2.6 g/cc</b>                         | <b>Al<sub>2</sub>O<sub>3</sub></b> | <b>56.9</b> |
|  | <b>Apparent Density:</b>  | <b>3.4 g/cc</b>                         | <b>SiO<sub>2</sub></b>             | <b>22.2</b> |
|  | <b>MOR:</b>   | <b>1800 psi</b>                         | <b>ZrO<sub>2</sub></b>             | <b>19.8</b> |
|  | <b>PCE:</b>   | <b>33</b>                               | <b>Fe<sub>2</sub>O<sub>3</sub></b> | <b>.50</b>  |
|  | <b>Linear Thermal Expansion:</b>  | <b>5.1 x 10<sup>-6</sup> (in/in/°C)</b> | <b>NaO</b>                         | <b>N/A</b>  |
|  |   |   | <b>CaO</b>                         | <b>.03</b>  |
|  |   |   | <b>MgO</b>                         | <b>.02</b>  |
|  |   |   | <b>TiO<sub>2</sub></b>             | <b>.30</b>  |
|  |   |   | <b>Other</b>                       | <b>.25</b>  |

**Thermal Expansion 300**



All data is subject to reasonable deviations and not to be used for specification purposes.