

GENERAL SPECIFICATION**COCKBURN QUICKLIME – KILN 5**

Values stated within this specification are based upon monthly means results from daily grab samples. Individual results may from time to time lie outside these ranges and such occurrence should not necessarily be regarded as failure of the sampled batch to conform to this general specification.

| Parameter | Method | Units | Typical | Range | AS1672-1997 Limits |
|--------------------------------|-------------------------|--------------|--|-------------|-----------------------|
| Chemical Analysis | | | | | |
| SiO ₂ | XRF | % | 7.5 | 5.5 – 9.5 | |
| Al ₂ O ₃ | XRF | % | 0.7 | 0.4 – 0.6 | |
| Fe ₂ O ₃ | XRF | % | 0.3 | 0.2 – 0.4 | |
| CaO | XRF | % | 83.5 | 81.0 – 86.0 | |
| MgO | XRF | % | 5.1 | 4.7 – 5.4 | |
| SO ₃ | XRF | % | 1.0 | 0.8 – 1.3 | |
| LOI | AS4489-1997 | % | 1.1 | 0.1 – 2.3 | |
| CO ₂ | AS4489-1997 | % | 0.8 | 0.3 – 1.4 | ≤ 5% |
| Available CaO | AS4489-1997 | % | 79.0 | 75.0 – 83.5 | ≥ 60% |
| Physical Analysis | | | | | |
| <i>Slaking by method</i> | ASTM C110 (Modified) | | | | |
| Total Temperature rise | | °C | 34.0 | 30.0 – 39.0 | |
| Total Active slaking time | | mins | 6.0 | 4.0 – 7.5 | |
| Parameter | Sieve (mm) | Units | Cumulative Retained Typical Range | | |
| Residue by Rotap | | | | | |
| | 6.7 | % | nil | nil | |
| | 2.36 | % | 0.5 | 0.1 – 1.5 | |
| | 0.60 | % | 3.5 | 1.0 – 5.5 | |
| | 0.30 | % | 18.5 | 10.5 – 26.0 | |
| | 0.15 | % | 65.0 | 52.0 – 74.0 | |
| | 0.045 | % | 88.0 | 78.0 – 98.0 | |
| Loose Bulk Density | | | kg/l | 0.9 | 0.8 – 1.0 |