



810 Great South Road, Penrose,
Auckland 1061,
New Zealand.
Telephone: 0800 CEMENT (236 368)
E-mail: customer.servicesoffice@goldenbay.co.nz

Test Certificate for Silica Fume: Microsilica SF

Test Report No.: 18#188

Sampling location *GBC Mount Maunganui Service Centre, NZ*
Sample date *22/05/18*
Origin of Silica Fume *Qinghai Province, China.*
Physical form *Fine Grey Powder*
Grade *Densified*

Sample Batch identification: **3055B 10 kg Bag**

| Property | Result | Test Method | AS/NZS 3582.3 Requirements | Testing Authority |
|---|--------|----------------|----------------------------|----------------------------|
| Moisture % | 0.7 | AS 3583.2 | 3.0 max | GBC Portland |
| Loss of Ignition % | 2.0 | AS 3583.3 | 6.0 max | GBC Portland |
| SO ₃ % | 0.8 | AS 3583.8 | 3.0 max | Cement Australia |
| SiO ₂ % | 96.6 | XRF | > 85 | SpectraChem Analytical Ltd |
| Total Alkali Content (Na ₂ O equiv.) % | 0.52 | XRF | - | SpectraChem Analytical Ltd |
| Chloride Ion % | 0.002 | AS 3583.13 | - | Cement Australia |
| Surface Area BET m ² /g | 18.2 | BET ASTM C1069 | - | Auckland University |
| Strength Index % | 138 | ASTM C1240 | - | Cement Australia |

Note: The above samples were tested as received in accordance with methods stated in the AS/NZS 3582.3.

Jim White
Quality System Co-ordinator
GBC Winstone

Date: 8/08/2018