

A86 and A860 Silica Powder

Silica/Quartz Powder

A86 and A860 are high purity quartz sand, which have been thoroughly dried, ground to the desired particle size and classified. These products can be use as filler in a variety of applications.

Chemical Analysis

| Parameter | Test Method | A86 | | A860 | |
|--------------------------------|---------------------|-----------|-----------|-----------|------------|
| | | Typical % | Limit % | Typical % | Limit % |
| SiO ₂ | XRF | 98.9 | 98.0 min | 98.4 | 98.0 min |
| Fe ₂ O ₃ | XRF/Spectro | 0.65 | 0.095 max | 0.029 | 0.035 max |
| Al ₂ O ₃ | XRF/A.A | 0.38 | - | 0.70 | 0.90 max |
| Cr ₂ O ₃ | XRF/F.P | 0.0004 | - | 0.0003 | 0.0007 max |
| K ₂ O | XRF/F.P | 0.05 | - | 0.35 | 0.55 max |
| Na ₂ O | XRF/F.P | 0.04 | - | 0.04 | 0.10 max |
| TiO ₂ | XRF | - | - | 0.07 | 0.10 max |
| LOI | Ignition at 1050 °C | 0.36 | - | 0.20 | 0.25 max |

Physical Analysis

| Particle Size Analysis (Coulter LS 130) | | | | |
|---|---------------------|---------------------|---------------------|---------------------|
| Parameter | A86 | | A860 | |
| | Typical % Cum. Ret. | Typical % Cum. Pass | Typical % Cum. Ret. | Typical % Cum. Pass |
| 40 micron | 0 | 100.0 | 14.0 | 86.0 |
| 30 micron | - | - | 24.3 | 75.7 |
| 20 micron | 1.0 | 99.0 | 40.2 | 59.8 |
| 15 micron | 3.0 | 97.0 | - | - |
| 10 micron | 5.0 | 95.0 | 62.2 | 37.8 |
| 5 micron | 29.0 | 71.0 | 76.2 | 23.8 |

| Parameter | Test Method | Typical A86 | Typical A860 |
|-----------------|----------------|----------------------------|---------------------------|
| Whiteness Index | ASTM (E313) | 65 | 70.40 |
| Surface Area | Rigden | 15,000 cm ² /gm | 5,500 cm ² /gm |
| Bulk Density | BS1460:1967*** | 600 kg/m ³ | 944 kg/m ³ |

XRF= X-ray Fluorescence; A.A= Atomic Absorption; F.P. Flame Photometer; Spectro= Visible Spectrometer
 ***= using approx 250 mls of loose powder and 10 drops.

Further Information

This data is not to be used for specifications. Values listed are for typical properties and should not be considered minimum or maximum.

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