

FEATURES AND BENEFITS

DESSEL, BELGIUM

Dedusted SILVERBOND[®] D6[™] and RP D10[™] are dedusted versions of our standard SILVERBOND[®] M6 and M10 crystalline silica, which are produced from high purity quartz feed stock for manufacturing and formulation of applications which require structurally sound, chemically pure or non-reactive fine mineral fillers.

Completely inert and pH neutral, SILVERBOND® will not alter or initiate when incorporated in catalysed or multi-component chemical systems, and will not degrade when employed in extreme temperatures or harsh environments. Dedusted SILVERBOND® offers formulators a low surface area, minimal oil absorption option to achieve high loading in coatings and cementitious systems and stiffening in elastomeric and high performance epoxy. Chemically pure dedusted SILVERBOND® also serves as an excellent nonconductor in electrical assemblies and potting compounds, and non-combustible filler in thermal insulating.

All SILVERBOND[®] grades are processed with adherence to ISO and internal quality assurance programs. The result is chemical purity and consistently uniform particle size distributions for predictable results supported by reliable services.

Both dedusted SILVERBOND® D6TM and RP D10TM have a SWERF (size weighted reispirable fraction) for crystalline silica below 1 %, thus avoiding the need to label for the risk of silicosis, potentially caused by respirable crystalline silica. These products contain less than 1% respirable quartz. Depending on the handling, application and use (eg mixing, milling, transportation, drying,...) airborne respirable quartz may be generated. Prolonged and/or massive inhalation of respirable crystalline silica dust may cause lung fibrosis, commonly referred to as silicosis. These products should be handled with care to avoid dust generation during its application.

GRANULOMETRIC DATA AND PHYSICAL CHARACTERISTICS Mean values. These do not represent a specification.

| | | D 6™ | М6 | RP ^(*) D10™ | M10 | | Method |
|----------------------|---------|-------------|------|------------------------|------|--------------------|------------------|
| control sieve | > 63 µm | 25 | 14 | | 2 | % | Alpine |
| | > 40 µm | 60 | | | | | |
| D10 | | 30 | 5 | 40 | 4 | μm | Malvern MS2000 |
| D50 | | 65 | 30 | 65 | 23 | μm | Malvern MS2000 |
| D90 | | 120 | 95 | 105 | 60 | μm | Malvern MS2000 |
| SWERF (Size-Weighted | | <1 | 4.6 | <1 | 5.5 | % | |
| Respirable Fraction | n) | | | | | | |
| density | | 2.65 | 2.65 | 2.65 | 2.65 | kg/dm ³ | |
| bulk density | | 1.25 | 1 | | 0.9 | kg/dm ³ | |
| specific surface | | - | 0.8 | | | m²/g | BET |
| | | 900 | 2450 | | 3600 | cm²/g | Blaine |
| hardness | | 7 | 7 | 7 | 7 | Mohs | |
| pН | | 7 | 7 | 7 | 7 | | |
| loss on ignition | | 0.12 | 0.12 | 0.12 | 0.12 | % | |
| colour | L* | 88 | 90 | | 92 | | Minolta CM-3610d |
| | a* | 0.8 | 0.87 | | 0.8 | | D65/10° |
| | b* | 3.2 | 4.13 | | 3.3 | | |
| refractive index | | 1.55 | 1.55 | 1.55 | 1.55 | | |

^(*) RP = research product. This product is not yet a standard commercial grade. Therefore some of its properties might still alter.



CHEMICAL ANALYSIS (XRF) %

Mean values. These do not represent a specification.

| SiO ₂ | 99.5 |
|--------------------------------|------|
| Fe ₂ O ₃ | 0.03 |
| Al_2O_3 | 0.20 |
| TiO ₂ | 0.03 |
| K ₂ O | 0.04 |
| CaO | 0.02 |
| | |



Please feel free to contact us for further information or advise on the safe handling of the product.

www.sibelco.be

The given information is based on mean values. The typical properties and chemical analyses are intended as examples and are not to be considered as substitutes for actual testing and analyses in those situations where properties and chemical compositions are critical factors.

Sales and supplies will always be according to our general sales conditions.

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