



SIBELCO

ENHANCE APPEARANCE. INCREASE DURABILITY.

**Performance materials for the next
generation of engineered stone surfaces**

Material solutions *advancing life*

MATERIAL SOLUTIONS WITH MULTIPLE BENEFITS

The finest engineered stone surfaces demand high quality raw materials. Encompassing cristobalite, quartz, silica and other specialty minerals, the Sibelco range delivers proven benefits across four key areas:



VISUAL DESIGN

achieve ultra-whiteness, enhance brightness and improve colour consistency



FUNCTIONALITY

increase your surfaces' mechanical strength, hardness and chemical resistance



EFFICIENCY

benefit from potential cost savings through material replacement and weight reduction



CONSISTENCY

the purity of our materials and rigid quality control ensures dependable results every time

SIBELITE® CRISTOBALITE SANDS AND POWDERS

- achieve ultra-whiteness and opacity (TiO₂ extending effect)
- increase multi-colour vividity
- Improve translucency and colour consistency
- enhance mechanical properties
- reduce net weight

SIBELITE® cristobalite is a high temperature polymorph of high purity quartz, produced at 1,500°C through calcination and iron-free grinding. The calcination process changes the crystalline composition of the quartz, creating a more open ring structure of SiO₂ units.

Offering one of the highest brightness levels of any mineral, **SIBELITE®** sands and powders provide a unique combination of high whiteness without yellowness, enabling you to achieve the purest of colour effects in ultra-white applications and other vivid colour designs. This offers potential cost savings by reducing the need for titanium dioxide as a pigment.

As a highly controlled, synthetically produced material, **SIBELITE®** has lower levels of colour impurities in comparison to natural minerals, helping you to significantly improve colour consistency.

With a specific gravity between 10-15% lower than alternative minerals, using **SIBELITE®** could also help you to reduce the net weight of your final product whilst at the same time increasing hardness and chemical resistance.

SIBELITE® is available in various particle sizes which can be combined to optimise loading levels.



SILICA SANDS AND FLOURS

- perfect for off-white applications
- improve chemical, water and stain resistance
- achieve higher consistency
- gain cost efficiencies

Available in a wide range of grain sizes, our silica sands and flours are an efficient, high-purity filler for engineered stone, helping to improve overall mechanical strength and hardness as well as improving resistance to chemicals, water and stains.

Particle sizes have been carefully engineered to optimise performance and enable maximum loading levels.

QUARTZ GRITS AND POWDERS

- achieve stunning opaque, transparent and semi-transparent design effects
- perfect for both white and multi-coloured applications
- high quality materials with lower impurities thanks to optical sorting

Our high-purity quartz grits and powders can help you to achieve unique surface designs, whether you are seeking opacity, transparency or semi-transparent effects.

All products in the range are classified in terms of purity, whilst dedicated production lines give us the flexibility to fully-tailor solutions to meet your individual requirements.

As a chemically inert structural filler, our quartz grits deliver a reliable silica contribution to provide consistent results.

SUPPORTING YOU TODAY AND TOMORROW

At Sibelco, our approach goes beyond the supply of high-quality materials - our solutions incorporate technical support, logistics expertise and access to leading-edge research and development facilities.

We work in partnership with our customers to find the optimal combination of batch materials to achieve desired quality levels with the least amount of energy consumption. As well as solving day-to-day production issues, we will help you to optimise manufacturing processes and explore new possibilities for future solutions, including:

- higher whiteness
- fewer black spots
- lower weight products
- reduced energy consumption / carbon footprint
- higher yields
- Process engineering

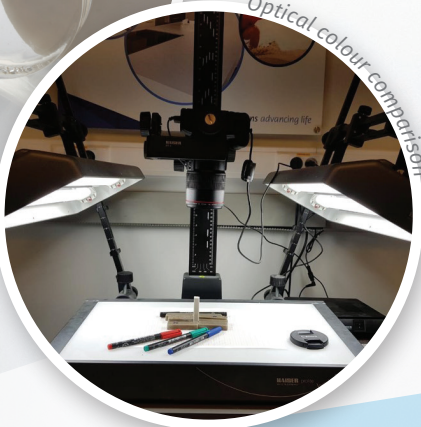
Our laboratory is equipped with the very latest technology, including three-dimensional SEM (scanning electron microscope) analysis which enables ultra-high-resolution imaging through which to examine surface fractures, microstructures and surface contaminations.

All of our products are backed by the highest standards of technical support, helping you to get the most from our materials and drive production efficiency.

OTHER SPECIALTY MINERALS

We offer a range of additional materials to support your unique design and manufacturing needs.

Product Name	Material	Mohs Hardness	Specific Properties
	Feldspar	6	low RCS; hard; inert; specific mineralogy
Portaflame®	ATH	3	flame-retardancy; solid surface
	Dolomite	3.5	low iron
	Recycled Glass	5.5	environmentally friendly; inert
	Olivine	6.5	green colour
	Barite	3.5	high density (4.5kg/l)
	Calcined Bauxite	8	one of the hardest minerals
Puraflo™	Clay & Kaolin	-	suitable for ceramic-type surfaces



A WORLD OF POSSIBILITIES

ABOUT SIBELCO

With operations in 30 countries and a global team of over 8,200 people, Sibelco is one of the world's leading providers of industrial minerals and other material solutions.

Combining materials, technology and knowhow, we create solutions for society's changing needs. From materials supporting rapid urbanisation and society's need for energy, to specialist minerals that enable new digital technologies. From game-changing glass recycling processes helping to

combat climate change, through to soil modifiers and filtration media that support the supply of food and clean water for a growing population. Like the world around us, our business is constantly evolving as we work with our customers to explore possibilities and create new, shared opportunities.

Everything we do is guided by our vision to be the best global material solutions company, market driven, operationally excellent, with a compelling culture.

SUSTAINABILITY

Founded back in 1872 and still privately-owned, we always take a long-term perspective. We invest for the future to secure a long-term supply of high-quality materials, at the same time ensuring that economic growth is always balanced with environmental stewardship and social responsibility.

Sustainable development and responsible business practices are core values that guide Sibelco. We recognise that today's decisions can have long-term implications. That's why we always manage our operations and resources proactively, ensuring a beneficial and sustainable future for our employees, customers, community members and other stakeholders.





GET IN TOUCH

To learn more about our range of materials for engineered stone and how our solutions could help your business, please get in touch with our team today.

Email: engineeredstone@sibelco.com

www.sibelco.com