



PRECISION COMPONENTS:

Whether small parts in large-scale production or high-precision components in small series, we implement cost-efficient solutions in different material qualities. Whether you are interested in CeSinit, aluminum or zirconium oxide, silicon carbide, boron or aluminum nitride – our know-how regarding the advantages and applications is so comprehensive as our material selection.

CERAMDIS GmbH

📍 Im Tubental 5, CH-8352 Elsau

☎ +41 44 843 20 00

✉ info@ceramdis.com

📅 +41 44 843 20 01

🌐 www.ceramdis.com

CERAMIC MATERIALS

CERAMDIS – Your competent supplier of custom solutions in high-performance ceramics



ASSEMBLIES:

By combining ceramic and other materials, amazing application advantages can be realized. Thanks to our many years of experience in bonding and joining technology, we offer assemblies that work and lead to successful use in your application. In many cases, only the combination of materials provides a cost-efficient and reliable solution.

COMPETENCE, QUALITY, AND FLEXIBLE THINKING WITH RESPECT TO CERAMIC SOLUTIONS

The CERAMDIS team offers accumulated experience in the industrial application of high-performance ceramics, based on many years of collaboration with innovative customers, comprehensive knowhow and the selection of different materials.



ADVANTAGES OF CeSinit®



Fine-grained standard quality for thermoforming – electrically insulating.

- ✓ High mechanical strength
- ✓ Barely wetting
- ✓ High fracture toughness
- ✓ Chemical resistance
- ✓ Low density
- ✓ Color: black
- ✓ Excellent thermal shock behavior



Same quality as CS40, however sintered at high pressure (HIP).

- ✓ Highest mechanical strength
- ✓ Barely wetting
- ✓ High fracture toughness
- ✓ Chemical resistance
- ✓ Low density
- ✓ Color: black
- ✓ Excellent thermal shock behavior

CeSinit® is silicon nitride made in Switzerland. Our thermoforming process enable the economic production of thin and long components and is thus deal for rods, capillaries, multi-hole tubes and flat sections. Geometrically complex components can also be realized quickly and cost-efficiently using green machining. This is beneficial for series production as well as prototypes.



Standard quality for thermoforming and pressed isostatically – electrically conducting.

- ✓ Suitable for EDM
- ✓ Can be galvanically coated
- ✓ Barely wetting
- ✓ High wear resistance
- ✓ Very good thermal conductivity
- ✓ Color: brown to golden brown
- ✓ Excellent thermal shock behavior



Standard quality pressed isostatically – electrically insulating.

- ✓ High mechanical strength
- ✓ Barely wetting
- ✓ High wear resistance
- ✓ Good chemical resistance
- ✓ Low density
- ✓ Color: gray
- ✓ Excellent thermal shock behavior

FURTHER CERAMIC MATERIALS



SILICON CARBIDE:

Very high thermal conductivity and wear resistance, excellent chemical resistance, and very good anti-friction properties.



ALUMINUM OXIDE:

Excellent electrical insulation, high wear resistance, good mechanical strength, and high chemical resistance.



ZIRCONIUM OXIDE:

For highest mechanical strength, low thermal conductivity, very good anti-friction properties, and Young's modulus like steel.



BORON NITRIDE:

Extreme sliding, lubrication, and separation capability, highest thermal shock resistance, very low thermal expansion.



ALUMINUM NITRIDE:

Highest thermal conductivity, outstanding electrical insulation event at high temperatures, good mechanical strength.