6.1.1 EOSINT S ceramics 5.2

Synthetically produced basic grain (very consistent spherical shape)

6.1.1.1 Application:

EOSINT S ceramics 5.2 is an aluminium silicate sand (synthetic mullite) coated with a phenol resin. The mould material has been specially developed and optimised for usage in the Direct Croning Process (DCP®). The material is suitable for the production of complex sand cores and sand moulds for all casting applications. Due to its high heat capacity and low thermal expansion, the primary application of this ceramic sand is in high-temperature casting. EOSINT S ceramics 5.2 can be processed on all EOSINT S 700 / 750 systems. The recommended layer thickness is 0.2 mm.

6.1.1.2 General material data:

Chem. composition	Aluminium silicate (synthetic mullite)	
Melting point of the sand	1825°C	
Specific density	2.7	g/cm³
Aggregate state	solid	
Mean grain size	140 ± 10	µm
AFS number	100 ± 5	
Bulk density	1.69	g/cm3
Loss on ignition	5.2 ± 0.2	%

Mechanical parameters for laser sintered cores:

Cold bending strength (green)	70 -140	N/cm²

The mechanical properties may vary for different exposure parameters. The information given represents our current knowledge. The information does provide any assurance of specific properties of the product or suitability for a specific application.