

# CALDE® SOL CAST A 50 SZ

**PRODUCT TYPE**

Maximum recommended temperature	: Alumina - Silica product
Main component	No cement castable
Type of bond	: Andalusite
Appearance	: Mineral reaction
Packaging	: 2 components: Dry powder and wet binder
Shelf life	: Aggregate: sack - Binder: drum
Installation method	: 18 months
Maximum grain size	: Vibrating
Material required	: 6 mm
Quantity of binder to be added	: 2.75 T/m <sup>3</sup>
Observation	: 8.0 / 9.0 kg per 100 kg of dry material Alkali resistant
Guidelines	: (6.2/ 7.0 litres per 100 kg of dry material) Installation Nr 45

PRODUCT PROPERTIES	STANDARD	AVERAGE VALUES	UNITS
<u>CHEMICAL ANALYSIS</u>			
Al <sub>2</sub> O <sub>3</sub>	EN ISO 1927-3	50.0	%
SiO <sub>2</sub>	EN ISO 1927-3	29.5	%
SiC	EN ISO 1927-3	9.4	%
ZrO <sub>2</sub>	EN ISO 1927-3	8.9	%
<u>PHYSICAL PROPERTIES</u>			
<u>Measured on samples prepared according to</u>	EN ISO 1927-5		-
<u>Bulk density</u>			
after drying at 110 °C	EN ISO 1927-6	2.75	g/cm <sup>3</sup>
after firing at 800 °C	EN ISO 1927-6	2.75	g/cm <sup>3</sup>
after firing at 1500 °C	EN ISO 1927-6	2.70	g/cm <sup>3</sup>
<u>Open porosity</u>			
after firing at 800 °C	EN ISO 1927-6	15.5	%
<u>Cold crushing strength</u>			
after drying at 110 °C	EN ISO 1927-6	70	MPa
after firing at 800 °C	EN ISO 1927-6	100	MPa
after firing at 1200 °C	EN ISO 1927-6	110	MPa
after firing at 1500 °C	EN ISO 1927-6	100	MPa
<u>Permanent linear change</u>			
after firing at 800 °C	EN ISO 1927-6	+0.1	%
after firing at 1200 °C	EN ISO 1927-6	+0.3	%
after firing at 1500 °C	EN ISO 1927-6	+1.0	%
<u>Thermal conductivity</u>			
at a mean temperature of 800 °C	EN ISO 1927-8	2.46	W/mK
at a mean temperature of 1000 °C	EN ISO 1927-8	2.37	W/mK
at a mean temperature of 1200 °C	EN ISO 1927-8	2.34	W/mK
<u>Reversible thermal expansion after firing [20-1000 °C]</u>		0.67	%

