C e r M a g
S M 2

Stable Magnesia derived from seawater derived magnesia and natural Magnesite. SM-2 has been hard burned (sintered) at high temperature to ensure thermal stability.

Refractory properties are not as high as with Electrofused material but generally suitable for most metal and alloy casting techniques.

This material has been derived for Dental and Jewellery Investment formulations with closely controlled parameters of chemistry and micronisation.

Typical Particle Size Distribution

(See separate data for particles size and reactivity)

100% = less than 70 micron

d_{90} Average = ca. 40 - 50 microns

d_{50} Average = ca. 10 - 15 microns

Analysed by Cilas Laser Particle Size Analyser

(Other size distributions are available and subject to the same degree of control)

Typical Chemical Analysis

Oxide	%
SiO_2	0,04
Al_2O_3	0,10
Fe_2O_3	0,10
CaO	0,65
B_2O_3	0,005
MgO	99.0

Physical Properties

Fired Colour: Off white/cream

Bulk Density

Before micronisation is between 3.42 and 3.45gcm^{-3}

Melting Point: Greater than 2000^{o}C

Surface Area (BET)

Typically 1m^{2}g^{-1}

Reactivity

Range in reactivity defined from our CerMag SM2-SF at 0.5 minutes through to our CerMag SM2-MS at 15 minutes. All reactivities are available within this range

Chemical Expansion

Controlled chemical expansions with our CermaDent range of stabilised monoammonium phosphate.

http://www.cermatco.co.uk
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