

Product data sheet

Elkem Microsilica® Black Star

Elkem ASA Silicon Products
 Drammensveien 169 P.O. Box 334
 Skøyen NO-0213 OSLO
 Tel: +47 22 45 01 00
 www.elkem.com

Description Elkem Microsilica® is a key ingredient in advanced low and ultra-low cement castables. It is highly reactive during sintering, which leads to improved ceramic bonding at reduced firing temperatures.

Applications Elkem Microsilica® Black Star is recommended mainly for black refractory monolithics.

- Benefits**
- Improved flow – easier to cast
 - Improved particle packing - denser castables
 - Gelification (coagulation) in gunning mixes
 - Improved hot-strength properties

Chemical analysis & physical data	Weight%	Spec*	Typical**
	SiO ₂ (diff.)		95
	C _{free} ***	max. 1.5	1.0
	SiC	max. 3.5	2.2
	Fe ₂ O ₃	max. 0.5	0.15
	Al ₂ O ₃	max. 0.5	0.3
	CaO	max. 0.7	0.4
	MgO	max. 0.3	0.2
	K ₂ O	max. 0.4	0.3
	Na ₂ O	max. 0.3	0.2
	H ₂ O ****	max. 0.5	0.3
	Properties	Spec*	Typical**
	Loss on Ignition	% max. 1.5	0.7
	Coarse Particles >45µm	% max. 1.0	0.6
	pH-value	6.5 – 8.5	7.4
	Bulk density ***	kg/m ³ 280-400	320

* Test methods are available upon request
 ** Typical values are for guidance only
 *** C in SiC is not included
 **** When packed

Packaging The product is available in 400 kg big bags and 25 kg bags. Please contact our sales representative for more details.

- Storage and handling**
- Avoid dust generation
 - Store material properly, protected from moisture and contamination

Health, safety & environment Please consult our Product Safety information on our website: <https://www.elkem.com/silicon-products/refractories/microsilica/page-1/>

Sustainability For Elkem, sustainability is central to our business strategy. Our mission is to provide advanced material solutions shaping a better and more sustainable future, adding value to our stakeholders globally. We are committed to reduction in embodied carbon emission. For further information, please visit www.elkem.com/sustainability/ or contact us to learn more about our sustainability roadmap.

Additional information and contact For further information, please contact our local sales representative. Our specialists will assist you in solving individual problems.