

GREENFLOW®

Bed material grade Olivine

Aheim, Norway

Features & Benefits

As a magnesium iron silicate, Greenflow® has a much higher resistance to alkaline fuel sources than silica sand, therefore limiting the impact of reaction problems such as agglomeration, fouling and corrosion.

Importantly, we were able to provide a customised grain size which eliminated the need for a costly reconfiguration of the boiler to accommodate a new type of bed material.

As well as reducing agglomeration, Greenflow® outperforms silica sand bed in terms of combustion efficiency thanks to its higher heat capacity. This means that less volume of bed material is needed, whilst also providing transport, storage and environmental savings. The use of Greenflow® therefore enhances overall process efficiency.

All Greenflow® grades are processed and sized with rigid adherence to statistical and quality assurance programs for superior performance and repeatable results.

Granulometric Data & Physical Characteristics

Mean values. These do not represent a specification.

	Sieve size	180-250	250-500	710-1400
% Retained in individual sieves	2000 µm	-	-	0.0
	1000 µm	-	0.1	65.4
	710 µm	0.0	8.7	25.4
	500 µm	0.2	35.9	5.7
	355 µm	8.0	41.6	1.8
	250 µm	53.2	10.9	0.8
	180 µm	30.2	1.8	0.4
	125 µm	6.7	0.6	0.2
	90 µm	1.2	0.2	0.1
	63 µm	0.4	0.1	0.1
<63 µm	0.1	0.1	0.1	

Specific gravity

 3.3 g/cm³
Initial sintering

Approx. 1450°C

Melting point

Approx. 1760°C

Thermal expansion

Approx. 1.1%

At 1200°C (linear)

Hardness

6.5 – 7.0

Mohs' scale

Chemical Analysis (XRF) %

Mean values. These do not represent a specification.

Mean values

Magnesium Oxide	MgO	49.0	
Silicon Oxide	SiO ₂	41.6	Present as silicate, contains <0.1% free crystalline silica.
Iron Oxide	Fe ₂ O ₃	7.3	
Aluminium Oxide	Al ₂ O ₃	0.3	
Chromium Oxide	Cr ₂ O ₃	0.4	
Nickel Oxide	NiO	0.3	
L.O.I.		0.6	Weight reduction after 30 minutes at 900°C/air.

Availability

The products are available in bulk. We deliver from Norway around the world. Availability might vary depending on the product requested or the point of destination.

For Product Information & Customer Service

Sibelco, P.O Box 45, N-1309 Rud, Norway

PHONE +47 67 15 22 00

Email: renewableenergy@sibelco.com

The technical data presented here is for marketing purposes only and is not contractually binding, the data herein is determined using Sibelco standard test methods. Since the product is based upon a naturally occurring material, we reserve the right to change this data when necessary. Safety information accompanying this product is available in the form of an SDS. All sales are undertaken strictly in accordance with our "General Conditions of Sale", available upon request, or by a written sales agreement duly signed by us.

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