PRODUCT DATA SHEET

Lapinus® RB215ELS

Very low shot, silane coated mineral fibre for friction applications

SPECIFIED PRODUCT PROPERTIES

Parameter	Value	Unit	Method
Shot content >63 µm	Max 0.5	wt%	TV316 (internal method)
Fibre length weighted average	150 ± 25	µm	TV305 (internal method)
Moisture content	Max 0.1	wt%	TV302 (internal method)
Ignition loss	Max 0.3	wt%	TV302 (internal method)

TYPICAL CHEMICAL PRODUCT PROPERTIES

Chemistry	SiO_2	Al_2O_3	TiO_2	Fe_2O_3	CaO	MgO	Na_2O	K_2O	P_2O_5	MnO
wt%	42.7	18.5	1.3	7.7	20.6	6.0	2.2	0.6	0.2	0.2

Test Method: XRF

Trace elements ppm	Chromium* (CrVI)	Thallium (TI)	Arsenic (As)	Barium (Ba)	Beryllium (Be)	Cadmium (Cd)	Cobalt (Co)
	<0.50	<5.0	<5.0	140	<1.0	<0.40	5.5
	Mercury (Hg)	Copper (Cu)	Nickel (Ni)	Lead (Pb)	Selenium (Se)	Vanadium (V)	Antimony (Sb)
	<0.10	15	15	<10	<2.0	56	<0.10

Test Method: NEN-EN-ISO17294-2 / * NEN-EN15192

TYPICAL PRODUCT PROPERTIES

Parameter	Value	Unit	Method
Shot content >45 µm	0.5	wt%	TV316 (internal method)
Shot content >63 µm	0.1	wt%	TV316 (internal method)
Shot content >125 µm	<0.1	wt%	TV316 (internal method)
Shot content >250 µm	<0.1	wt%	TV316 (internal method)
Shot content >600 µm	<0.1	wt%	TV316 (internal method)
Fibre diameter numerical average	5.5	µm	TV165 (internal method)
Fibre diameter numerical D10	1	µm	TV719 (internal method)
Fibre diameter numerical D50	4	µm	TV719 (internal method)
Fibre diameter numerical D90	8	µm	TV719 (internal method)
Specific surface area	0.20	m²/g	TV165 (internal method)
Fibre length distribution	Log-normal		
Aspect ratio	25	l/d	Theoretical calculation
Colour	Grey-green		Visual appearance
Colour	65 - 0.8 - 11	CIE L*a*b*	TV711 (internal method)
Hardness	6	moh	ASTM E2546-07

TYPICAL PRODUCT PROPERTIES

Parameter	Value	Unit	Method
Extract pH	9.8		ISO787-9:1995
Acid resistance (pH)	≥3		HCl 20ºC (internal method)
Alkaline resistance (pH)	≤12		NaOH 20ºC (internal method)
Water solubility cold	0.2	wt%	ISO787-8-2001
Water solubility hot	0.1	wt%	ISO787-3-2001
Melting point (full liquification)	>1200	ºC	DSC
Crystallization temperature	881	ºC	DSC
Dimensional stability	>1100	ºC	TV315 (internal method)
Softening point	833	ºC	Littleton
Glass transition temperature	683	ºC	DSC
Specific density	2.75	g/cm³	Chemical calculation
Elastic modulus	100	Gpa	20ºC- 50%RH (internal method)
Tensile strength	800	Mpa	20ºC- 50%RH (internal method)
Surface treatment	Amino-silane		
Storage conditions	dry, <50ºC		

All Lapinus products are certified biosoluble and safe for human and environment.

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Content and interpretation of the Lapinus PDS

With the new PDS, we want to give as much relevant information on our products as we can, which can better serve your needs in application development.
With the increased amount of information on the PDS, we have made a split in ‘Specified’, ‘Chemical’ and ‘Typical’ product properties.

The ‘Specified’ product properties are the properties which are controlled on a regular interval and are our specification of the product.

The ‘Chemical’ product properties show the chemical proprietary composition of our stone wool products. This composition guarantees that the fibres are safe to use.

The ‘Typical’ product properties are a list of various product properties that are known from the Lapinus® material. The list is based on past inquiries from customers in various applications. Not all properties will be relevant for all applications. The list is included in the PDS for your reference. The values of the ‘Typical’ product properties do not form part of the specification of the products.