www.basaltft.com
info@basaltft.com
Australian Made

BASALT FIBER TECH
Advanced Composite and Concrete Solutions

BASFIBER® CHOPPED STRANDS

Basfiber® special basalt chopped strand for epoxy, phenolic, vinyl ester and polyester resins. This product is mostly recommended for manufacture of frictional materials. In case of different application, special sizing composition is also possible.

NOMENCLATURE

Our nomenclature is based on three letter followed by the monofilament diameter followed by the cut length.

Example: CSF-17 12.7mm

The first three letters will be always CSF which stands for our Chopped Strand Fiber products. The monofilament diameter is 17µm and the cut length is 12.7mm.

TYPE OF SIZING	02	05/1	11	12	13
Type of Fiber			**Basfiber®**		
Monofilament Diameter [µm]	13 to 22	13 to 22	13 to 22	13 to 22	13-19
Cut Length(mm):					
3.17mm	Yes	Yes	Yes	Yes	
6.35mm	Yes	Yes	Yes	Yes	Yes
12.7 mm	Yes	Yes	Yes	Yes	Yes
25 mm	Yes	Yes	Yes	Yes	Yes
31.75 mm	Yes	Yes	Yes	Yes	Yes
50.08 mm	Yes	Yes	Yes	Yes	Yes
63.5 mm	Yes	Yes	Yes	Yes	
88.9 mm	Yes	Yes	Yes	Yes	
127mm	-	Yes	Yes	Yes	-
254mm	-	Yes	Yes	Yes	-
Sizing Content:	≥0.4	0.06 -0.10	≥0.4	≥0.4	≥0.4
Resin Compatibility	Phenolic, epoxy, acrylate, polyamide.	Water Media	Epoxy, polyester and vinil ester	Epoxy phenolic	Concrete
Moisture Content	<0.1	6-9	<0.1	<0.1	<0.1

Packaging:			Amount of fiber (Kg)		
PP Bag	20	25	20	20	20
GG Bag	500-600		500-600	500-600	500-600
Pallet CardBoard	800	800	800	800	800
Plastic Container		1000			

SIZE	APPLICATIONS
02	Basalt chopped strand of this series is mainly recommended for friction material production using phenolic resin system and BMC using epoxy resin system.
05/01	Basalt chopped strand of this series is mainly recommended for wet laid nonwoven mats and veils production, as well as for concrete reinforcement.
11	Chopped strand of this series is mainly recommended for BMC using epoxy, polyester and vinyl ester resin systems.
12	Basalt chopped strand of this series is mainly recommended for friction materials production and BMC using epoxy and phenolic resin systems.
13	Basalt chopped strand of this series is mainly recommended for shotcrete and premix technologies for construction market.

.

SIZING COMPATIBILITY

No. OF SIZING	TYPE	COMPATIBILITY	SIZING CONTENT, % WEIGHT	MOISTURE, % WEIGHT
02	Silane	Phenolic, epoxy, acrylate, polyamide.	≥0,4	<0,1
05/01	Silane	Water Media	0.06-0.10	6-9
11	Silane	Epoxy, polyester and vinil ester	≥0,4	<0,1
12	Silane	Epoxy phenolic	≥0,4	<0,1
13	Silane	Concrete	≥0,4	

THERMAL OPERATION RANGE OF BASFIBER®

Permanent	**From -260 up to +400 °C**
(1) Stage 1: amorphous fiber with sizing on the fiber surface	Up to +200 °C
(2) Stage 2: burning of sizing (10-15 minutes), amorphous fiber	From +200 up to +350 °C
(3) Stage 3: amorphous fiber without sizing on the fiber surface	From +350 up to +400 °C
Short term (few minutes)	**From +400 up to +850 °C**
(4) Stage 4: transition of FeO into Fe2O3 and beginning of crystalliza	From +400 up to +850 °C
Short term (few seconds)	**From +850 up to +1250 °C**
(5) Stage 5: all the Fe2O3 is in crystal form, the material is extremely brittle, its mechanical properties are extremely poor but without stress and vibration it continues working as thermo insulation pretty good	From +850 up to +1050 °C
(6) Stage 6: sintering temperature	From +1050 up to +1250 °C

TENSILE STRENGTH CHANGE BY THE HEATING OF BASFIBER®

Temperature	+20°C	+200°C	+400°C
Tensile Strength Change	100%	95%	80%

THERMAL PROPERTIES

Melting Range:	1460-1500˚C
Crystalization temperature:	1250 ˚C
Sintering Temerature:	1050 ˚C
Thermal Conductivity, W/(m·K)	0.031-0.038