

**Product survey**

**StarStran®**

**BMC – cut fibers for thermoset material**

**for BMC – moulding compound and reinforcement of UP-resins**

Type	Filament	Length	Conveying, Dosage	Mechanical characteristics
254	15 µm	6 - 24 mm	**	**
860	15 µm	6 - 12 mm	***	***
861	15 µm	6 - 12 mm	***	***

- Good flowability and dosage
- Optimum dispersion of the fibers in its filaments
- High mechanical strength of the final product

**StarStran®**

**LCF – long cut glass fibers**

**for needling, airlaid-process, insulation of ovens**

Typ	Filament	Length	Conveying, Dosage	Mechanical characteristics
LCF 991	13 µm	51 mm	**	**

- consistent fiber diameter and consistent length
- controlled moisture content
- good dispersion at high speed
- compared with natural fibers– free of formaldehyde, no fogging, less sag

Product information

**StarStran®**  
 BMC cut fibers 254



**Description:**

StarStran® BMC cut fibers 254 are produced of silanized E-glass fibers.

The recommended field of application is the production of BMC—mouldings and in general the reinforcement of unsaturated polyester resins e.g. filler etc.

The product is produced of e-glass, marked as aluminium borosilicate glass according to DIN 1259-1 and ASTM D 578.

**Quality characteristics:**

- ✓ Good flowability and dosage
- ✓ Optimum dispersion of the fibers in its filaments
- ✓ High mechanical strength of the finished part



**Technical characteristics (target values):**

	Method	Unit	SV EC 15 254 (6mm)	SV EC 15 254 (12mm)	SV EC 15 254 (24 mm)
<b>Filament diameter</b>	SOP 840_4-11-13	mm	14 – 16	14 – 16	14 - 16
<b>Cut length</b>	SOP 840_4-11-18	mm	5.0 – 7.0	10.5 – 13.5	22.0 – 26.0
<b>Moisture content</b>	ISO 3344	%	0.15	0.15	0.15
<b>Glowing loss (LOI)</b>	ISO 1887	%	0.80 – 1.20	0.80 – 1.20	0.80 – 1.20

Max. 2% of the cut fibers can be outside the length range  
 Max. 0.1% of the short fibers can be twice as long  
 Max. 0.02% of the short fibers can have a length up to 50 mm



Product information

**StarStran®**  
 BMC cut fibers 860



**Description**

StarStran® BMC cut fibers 860 are produced of silanized E-glass fibers.

The recommended field of application is the production of BMC-mouldings and in general the reinforcement of unsaturated polyester resins e.g. filler etc.

The product is produced of e-glass, marked as aluminium borosilicate glass according to DIN 1259-1 and ASTM D 578.

**Quality characteristics:**

- ✓ Good flowability and dosage
- ✓ Optimum dispersion of the fibers in its filaments
- ✓ High mechanical strength of the finished part



**Technical characteristics (target values):**

	Method	Unit	SV EC 15 860 (6mm)	SV EC 15 860 (12mm)
<b>Filament diameter</b>	SOP 840_4-11-13	mm	14 – 16	14 – 16
<b>Cut length</b>	SOP 840_4-11-18	mm	5.0 – 7.0	10.5 – 13.5
<b>Moisture content</b>	ISO 3344	%	0.10	0.10
<b>Glowing loss (LOI)</b>	ISO 1887	%	0.60 – 0.90	0.60 – 0.90

Max. 2% of the cut fibers can be outside the length range  
 Max. 0.1% of the short fibers can be twice as long  
 Max. 0.02% of the short fibers can have a length up to 50 mm



Product information

**StarStran®**  
 BMC cut fibers 861



**Description:**

StarStran® BMC cut fibers 861 are produced of silanized E-glass fibers.

The recommended field of application is the production of BMC—mouldings and in general the reinforcement of unsaturated polyester resins, in BMC, optimized for high shearing force (injection moulding process).

The product is produced of e-glass, marked as aluminium borosilicate glass according to DIN 1259-1 and ASTM D 578.

**Quality characteristics:**

- ✓ Good flowability and dosage
- ✓ Optimum dispersion of the fibers in its filaments
- ✓ High mechanical strength of the finished part



**Technical characteristics (target values):**

	Method	Unit	SV EC 15 861 (6mm)	SV EC 15 861 (12mm)
<b>Filament diameter</b>	SOP 840_4-11-13	mm	12 - 14	12 - 14
<b>Cut length</b>	SOP 840_4-11-18	mm	5.0 – 7.0	10.5 – 13.5
<b>Moisture content</b>	ISO 3344	%	0.10	0.10
<b>Glowing loss (LOI)</b>	ISO 1887	%	1.50 – 1.90	1.50 – 1.90

Max. 2% of the cut fibers can be outside the length range  
 Max. 0.1% of the short fibers can be twice as long  
 Max. 0.02% of the short fibers can have a length up to 50 mm



Product information

**StarStran®**  
 BMC cut fibers 991



**Description:**

StarStran® LCF 991 long cut fibers are produced of E-glass fibers with fixed lengths.

These short fibers LCF 991 are coated with a chemical size layer.

The recommended field of application is carding /needling, air-laying process as well as the insulation of ovens.

Resin-compatibility: PP, PA, polyester and further technical polymeres.

The product is produced of e-glass, marked as aluminium borosilicate glass according to DIN 1259-1 and ASTM D 578.

**Quality characteristics:**

- ✓ Unique fiber diameter, unique length, excellent size
- ✓ High product quality, controlled moisture content
- ✓ Good distribution at high speed
- ✓ Free from formaldehyde, no fogging, no sagging



**Technical characteristics (target values):**

	Method	Unit	CS EC 13 991 51mm	EC 13 991 51mm V	EC 13 991 102 mm
<b>Filament diameter</b>	SOP 840_4-11-13	mm	9 – 14	12 - 14	9 - 14
<b>Cut length</b>	SOP 840_4-11-18	mm	46 – 56	46 - 56	90 - 115
<b>Moisture content</b>	ISO 3344	%	0.1 – 1.3	1.0 – 5.0	1.0 – 5.0
<b>Glowing loss (LOI)</b>	ISO 1887	%	0.03 – 0.13	0.03 – 0.13	0.03 – 0.13

Max. 2% of the cut fibers can be outside the length range;



## Packaging and labeling:

<b>Carton:</b>	700 kg	– pallet size 1120 x 930 mm
<b>Octabin (PE-bag in carton):</b>	600 – 800 kg	– pallet size 1125 x 1125 mm
<b>Big Bag:</b>	600 – 800 kg	– pallet size 1100 x 1100 mm

Each packing unit is marked with following information:

Producer, product name, batch, gross- / net weight, product code, production date, packaging code

## Transport and storage conditions:

The product has to be transported in closed and moisture protected vehicles. A quality certificate is attached to each delivery.

The products should be stored in the original packaging in dry, roofed, and dust-free warehouses. The recommended temperature should be between 10°C and 30°C at a relative air moisture between 50% and 75%.

Before working the products should be conditioned in the working area in original packaging for at least 24 hours. The pallets may not be stacked, unless otherwise written on the packing unit.