

PRODUCT STANDARD TME DIVN. BHOPAL

TME 2011

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Material Specification of Glass Fibre Cord 1

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1 General

1.1 Scope

This instruction lays down all the requirements which are made for the semi-finished product glass fibre cord 1.

1.2 Description, Definition

Glass fibre cord 1 consists of several parallel glass staple fibre slubbings, braided in glass filament yarn. The cord must be free from oil-dextrine size. The braiding has a silan finish.

1.3 Product Designation

For semi-finished product	Designation text
Glass fibre cord	Rd diam.-Glasfaserkordel 1

1.4 Dimensions

As per order.

1.5 Delivery Documents, Destination For Delivery

As per order.

1.6 Order

The order is the summary of the particulars and regulations that apply to the delivery. BHEL reserves the right to test all the requirements listed, test material for which is included in the order. The order can contain requirements which differ from or supplement instruction. (except the section 2.1. "Properties").

1.7 Supplier's Product Designation

Glass fibre cord 1 must receive from the supplier a designation of quality which must be changed if alterations are made to the composition, the quality of the raw materials, the method of manufacture or other factors that could influence the technological properties of the semi-finished product.

1.8 Acceptance of New Products

Attainment of the properties listed is not in itself sufficient for the acceptance of new, previously unaccepted products. Only if after particular experiments, practical service tests and if necessary, other considerations have been taken into account, it appears that the new product is acceptable and interchangeable, may we decide to convert to it.

Revision Details: As per revision sheet			Distribution	Qty.	Approved S. P. Singh Sr.DGM/TME	
Rev. No.	Date of Rev	Reaffirmed Year	TME TXM TNX QMX	1	Prepared P. Telang Dy. Mgr/ TME	Dt. of 1 st Issue 22.09.97
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				2		
					Checked V.Rawtiya DGM/TME	

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2 Requirements

2.1 Properties

Code	Size, term	Unit	Values	Test method
01155	Mass per unit length	---	see section 2.4.1	---
03400	Surface treatment (fabric dressing) presence of aminosilane in the braiding	---	positive	1)
	presence of oil-dextrine in filling and braiding		negative	
14350	Compressibility: remaining thickness, relative to the diameter under a load of 30 N per cm length	%	40 ... 55	2)
	when relieved		> 80	
51110	Burn-out loss Mass content	%	≤ 2	ISO 1887 (after drying for 1 hr. at 110 °C)

2.3 Consignment

2.3.1 Form of the Consignment

Glass fibre cord in various diameters, packed in a polythene bag by bundles.
 For $\phi \leq 11$ mm in bundles of 100 to 200 m.
 For $\phi 13 \dots 20$ mm in bundles up to 50 m.
 For $\phi 25 \dots 30$ mm in bundles up to 50 m.
 For $\phi 40$ mm and above in bundles up to 25 m.

2.3.2 Packing

The individual shipments are to be packed so that no damage can arise during transport.

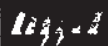
2.3.3 Transport

The shipment is to be made by rail or road transport in such a way that it can be unloaded easily.

2.3.4 Identification

Each item of the consignment (crate, palette, skein etc.) must be labelled securely and indelibly (e.g. with an adhesive label or an appendage) with the following details: Designation text of product, quantity and eventually batch and test numbers.

- 1) Aminosilane with bromocresol green will colour the glass cloth blue. Oil-dextrine will give a blue-black colouring with 0.1% iodine/potassiumiodide solution.
- 2) This is determined on a piece of cord at least 160 mm long between two 140 mm diameter plates of the compression attachment of a tensile testing machine. The distance between the plates at a load of 420 N determines the remaining thickness.



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2.4 Permissible Variations

2.4.1 Dimensions

Diameter in mm	Mass per unit length and permissible deviation g/m	Diameter in mm	Mass per unit length and permissible deviation g/m
1.8		14	90 ± 8
2.6		16	110 ± 12
3		18	
4		20	160 ± 16
5	20 ± 3	22	
6			
7	33 ± 5	25	230 ± 25
8			
9		30	300 ± 30
10			
11	60 ± 6	40	
13		50	

3. Reference to ABB Standards

This spec. is equivalent to ABB spec. ZN02035.

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