



CUSTOMER ACCEPTANCE STANDARD

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FIBERGLASS CONTINUOUS FILAMENT TEXTURIZING YARNS FOR THE WEAVING INDUSTRY

I. DESCRIPTION

Fiberglass yarn is a natural, lustrous, white, continuous filament yarn that is evenly twisted on supply packages. The yarns are smooth, non-cellular and generally cylindrical in form. The yarns are made of glass of high stability and durability and are with the exception of sizing ingredients, inorganic, incombustible and will neither expand nor contract with moisture changes. The glass composition meets the certification for "E" glass as defined by ASTM's D 578-00 Standards Specification for Glass Fiber Strands. The individual glass fibers do not tend to absorb moisture and are extremely flexible. The sizing may be burned off the yarn under certain conditions. Weathering tests have indicated comparatively unlimited stability under repeated cycles of heat, cold, sunlight, dampness and drying. These yarns are sized with a special texturizing size designated as 602.

II. USE

These yarns are designed to permit further fabrication that will result in texturized yarns.

III. YARN NOMENCLATURE- Reference Textiles Fibers For Industry for more information

Example Product Name (US Customary System)

ECDE 100 1/0 0.7Z

- E- Electrical glass formulation
- C- Continuous filaments
- DE- Filament diameter (See Table 1)
- 100- Yards per pound divided by 100
- 1/0- Single yarn end
- 0.7Z- Turn per inch (TPI)

Example Product Name (SI System)

EC6-50 1X0 Z28

- E- Electrical glass formulation
- C- Continuous filaments
- 6- Filament diameter (See Table 1)
- 50- grams per 1000 meters of yarn
- 1X0- Single yarn end
- Z28- Twists per meter (TPM)

Throughout history, the actual yardage or tex of yarn products has often been shifted from the actual yield provided in the product name. Therefore, the yarn name is only used as a descriptor. The table in section V. must be utilized to obtain the actual bare glass yield of a yarn product.



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IV. AVAILABLE PRODUCTS AND ADDITIONAL VISUAL PROPERTIES- Reference Textiles Fibers For Industry for more information

Filament Designation US Units	Filament Designation SI Units	Range for Average Filament Diameter			
		Minimum Inches	Maximum Inches	Minimum mm	Maximum mm
DE	6.0	0.00023	0.000269	5.84	6.85
G	9.0	0.00035	0.000399	8.89	10.15

V. AVAILABLE PRODUCTS AND BARE GLASS YIELD PROPERTIES

Product Name*	Product Name (SI) *	Sizing	Bare Glass Yield						Typical Cv**
			Nominal Yds/ lb	Minimum Yds/ lb	Maximum Yds/ lb	Nominal Tex	Minimum Tex	Maximum Tex	
ECDE 37 1/0 0.5Z	EC6-136 1X0 Z20	602	3700	3459	3940	134.1	125.9	143.4	2.3
ECDE 50 1/0 0.7Z	EC6-99 1X0 Z28	602	5000	4700	5300	99.2	105.5	93.6	2.0
ECDE 75 1/0 0.5Z	EC6-68 1X0 Z20	602	7500	6975	8025	66.1	61.8	71.1	2.3
ECDE 100 1/0 0.7Z	EC6-50 1X0 Z28	602	10000	9400	10600	49.6	46.8	52.8	2.0
ECG 37 1/0 0.3Z	EC9-134 1X0 Z12	602	3700	3496	3904	134.1	127.1	141.9	2.5

*- Nomenclature used for identification purposes only. Nomenclature may not indicate true yield.

** - Cv provided as a reference only. This is not a specified product property.



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VI. AVAILABLE PRODUCTS AND ADDITIONAL PHYSICAL PROPERTIES

Product Name	Tex Designation	Sizing	Strand Solids			Minimum Tensile	
			Percent Strand Solids	Minimum Percent Strand Solids	Maximum Percent Strand Solids	Lbs	Newtons
ECDE 37 1/0 0.5Z	EC6-136 1X0 Z20	602	0.50	0.32	0.68	11.2	49.8
ECDE 50 1/0 0.7Z	EC6-99 1X0 Z28	602	0.50	0.32	0.68	8.0	35.6
ECDE 75 1/0 0.5Z	EC6-68 1X0 Z20	602	0.50	0.32	0.68	5.7	25.4
ECDE 100 1/0 0.7Z	EC6-50 1X0 Z28	602	0.50	0.32	0.68	4.3	19.1
ECG 37 1/0 0.3Z	EC9-134 1X0 Z12	602	0.50	0.32	0.68	11.2	49.8

Breaking Strength - The strength is expressed in pounds (newtons) per end. The minimum strengths will be the average of four breaks per package.

Diameter - Yarn diameter is listed for reference purposes only, and is not a cause for rejection.

Moisture The maximum moisture for individual packages is 0.75%.

VII. AVAILABLE PRODUCTS AND VISUAL PROPERTIES

Product Name	Tex Designation	Sizing	Maximum Average Broken Filaments (360° Count)	Filament Count*	Approximate Yarn Diameter		Twist Tolerance	
					Inches	mm	TPI	TPM
ECDE 37 1/0 0.5Z	EC6-136 1X0 Z20	602	10	1632	0.0156	0.396	0.15	8
ECDE 50 1/0 0.7Z	EC6 -99 1X0 Z28	602	10	1224	0.0119	0.302	0.21	12
ECDE 75 1/0 0.5Z	EC6-68 1X0 Z20	602	10	816	0.0106	0.269	0.15	8
ECDE 100 1/0 0.7Z	EC6-50 1X0 Z28	602	10	612	0.0098	0.249	0.21	12
ECG 37 1/0 0.3Z	EC9-134 1X0 Z12	602	10	816	0.0156	0.396	0.09	4

* The number of filaments and nominal filament diameter are for reference purposes only. Yarns are controlled according to yards per pound (linear density-TEX).

**In the event that Advanced Glassfiber Yarns or the customer has reason to suspect that a shipment may contain MIXED YARN, the party first suspecting such condition will notify the other, Advanced Glassfiber Yarns and assumes responsibility for initiating appropriate action. The use of the suspect material should be discontinued pending an investigation of the facts.



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VIII. PACKAGING WEIGHT AND METERING DATA

Average package weight is for information only. All packages are completely splice-free. Metered and nonmetered material is packaged separately.

Product Name	Tex Designation	Sizin g	Bobbin Type	Average Package Weight		Shipment Makeup		Comments
				Lbs.	Kg	Ratio	Description	
ECDE 37 1/0 0.5Z	EC6-136 1X0 Z20	602	8542	7.9	3.6	85%	Mtd 29,800 yds (27,249m)	
				5.2	2.4	15%	2.0 lbs (0.91 kg) to full	
ECDE 37 1/0 0.5Z	EC6-136 1X0 Z20	602	8571	17.2	7.8	80%	Mtd 62,500 yds (57,150m)	
				11.5	5.2	20%	2.5 lbs (1.14 kg) to full	
ECDE 50 1/0 0.7Z	EC6-99 1X0 Z28	602	8542	8.7	3.9	70%	Mtd 42,800 yds (39,136m)	
				6.8	3.1	30%	2.0 lbs (0.91 kg) to full	
ECDE 75 1/0 0.5Z	EC6-68 1X0 Z20	602	8542	8.4	3.8	70%	Mtd 62,000yds (56,693m)	
				6.6	3.0	30%	2.0 lbs (0.91 kg) to full	
							8571	
				11.2	5.09	30%	2.0 lbs. (0.91 kg) to full	
ECDE 100 1/0 0.7Z	EC6-50 1X0 Z28	602	8542	8.0	3.6	70%	Mtd 78,500 yds (71,780m)	
				5.4	2.4	30%	2.0 lbs (0.91 kg) to full	
ECG 37 1/0 0.3Z	EC9-134 1X0 Z12	602	8571	18.0	7.3	70%	Mtd 67,000 yds (61,265m)	
				13.3	6.0	30%	5.0 lbs (0.91 kg) to full	

Notes: Metering tolerance is plus 3%.

IX. PACKAGE DESCRIPTION

See Advanced Glassfiber Yarns document AGY-PD1 for more information.



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X. PREPARATION FOR SHIPMENT

- A. Package Identification
 - 1. An identification disc will identify each package.
 - 2. The discs for the various yarn constructions will be per the system of identification set up by Advanced Glassfiber Yarns.
- B. The packages shall be packed in a container suitable to insure adequate protection in transit and stores.
- C. A content label shall adequately identify each carton.