



**CUSTOMER
ACCEPTANCE
STANDARD**

No.: TP-210
 Date: 19-Sep-18
 Supersedes: 22-Mar-16
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FIBERGLASS POLYESTER COMBINATION YARN

I. DESCRIPTION

Fiberglass Polyester Combination Yarn is Continuous Filament Fiberglass Yarn plied with Polyester Continuous Filament Yarn. Fiberglass Polyester Combination yarn is available as multiple ends wound on serving packages.

II. USE

The "Fiberglass Polyester Combination" yarns are primarily used in magnet wire applications.

III. AVAILABLE PRODUCTS, PHYSICAL PROPERTIES AND PACKAGES

A. Available Plied Yarns

FIBERGLASS-POLYESTER COMBINATION	FIBERGLASS YARN	GLASS DENIER	POLYESTER DENIER	COMBINATION DENIER
GDD941 1/2 2.0S	ECD 900	50.51	40	90.51
GDD471 1/2 2.0S	ECD 450	100.97	70	170.97

Note: All sizing applied to glass yarns are "starch based."

B. Physical Properties

FIBERGLASS/POLYESTER COMBINATION	NOM. YDS/LB¹ (W-07EA)*	NOM. TPI	APPROX DIAMETER INCHES² (D-02EA)*	APPROX BUILDUP INCHES² (D-02EA & EB)*	APPROX SPREAD INCHES² (D-02EA)*	MIN BREAK STRENGTH (LBS)³
GDD941 1/2 2.0S	49,323	2.0S +/- 0.53	.0054	.0036	.0081	.85
GDD471 1/2 2.0S	26,112	2.0S +/- 0.53	.0078	.0045	.0106	1.63

- To calculate Yardage Limits when multiple ends of a product are offered on a package, divide the nominal shown by the number of ends supplied on the package. This yardage will fall within a +/- 10% range.
- These values are given only as a guide to be used in selection of products for a particular end use. The customer must satisfy himself that the products have sufficient average properties and sufficiently low variability to meet the intended end use.
- Breaking strength is a theoretical calculation based upon the single end break strength and is provided for information only.

* Owens Corning Test Methods - Copies are available upon request.

This specification is subject to change without notice.

C. Available Packages and End Count

YARN	5051 / 5052 ENDS
GDD941 1/2 2.0S	4-24, 32, 40, 48
GDD471 1/2 2.0S	4-24, 32, 40

NOTE: Package 5051 & 5052 are plastic serving spools.
Trigger ends are available upon customer request.

IV. WORKMANSHIP AND VISUAL DEFECTS

A. Workmanship

- The packages shall be firm, smooth, evenly wound packages of Glass-Polyester Combination yarns
- Packages shall be built firmly with a minimum of bulges, dips or waves
- Packages shall be wound with sufficient tension so the yarn will be tight on the tube but not so tight as to change the inside diameter or deflect the flanges
- Bands of yarn shall lay smooth and flat with uniform close spacing
- Wax treated tubes shall be employed
- Tying in the ends of yarn around the tube shall start the package. The finishing ends shall be taped to the package by a pressure sensitive tape approximately 1/4" x 3/4".

B. Visual Defects - Visual defects are defined as those defects, which are visible to the unaided eye.

Packages containing the following defects are rejectable:

- Yarn improperly centered on tube
- Improper splicing or knotting
- Damaged packages resulting from blows or abrasions
- Rough winding or improper spacing
- Soiled or dirty yarn
- Packages containing fuzz balls and/or entrapped waste
- Packages having one or more ends over side
- Packages having loose tubes
- Incorrect number of ends

V. PACKAGING AND IDENTIFICATION

A. Packaging

1. Available Packages and Dimensions

	PACKAGE	
	5051	5052
Type Package	Plastic Serving	Plastic Serving
Type Tube	Plastic	Plastic
Inside Diameter	1.620" – 1.625"	1.620" – 1.625"
Length	3 17/32" +/- 1/64"	5 3/4" +/- 1/64"
Traverse	3"	5.25"
Waywind	Parallel	Parallel
Maximum O.D.	5 15/16"	5 15/16"
Minimum O.D.	4"	4"
Approx. Net Wt / Pkg.	3.5 lbs.	5.6 lbs.



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Notes:

A minimum of 90% of the packages shall be at the stated maximum O.D. within a tolerance of +0", -1/8". A maximum of 10% of the packages may be between the minimum O.D. to within 1/8" of the maximum O.D. Packages in this category in excess of 10% are rejectable.

* ID is for cardboard core in plastic part. Tolerances for all paper tubes:

LENGTH	+/- 1/64"
I.D.	+/- 0.003"

Cardboard core tubes are purchased to the above tolerances. Slight changes to the physical dimensions of the tubes may result through handling, winding or shipping. For these reasons, these dimensions are provided for information only.

2. Cartons and Pallets

PACKAGE NO.	5051	5052
Carton	T-354	T-354
Pkg. / Ctn.	15	9
Ctn. / Pallet	12	12
Pkg. / Pallet	180	108
Avg. Net Wt / Pallet (lbs.)*	630	605

Each package shall be placed in individual cells within the carton.

*For information only, approximate weight.

B. Identification

1 Tube Identification

All serving packages shall have sticker affixed to one flange (including, but not limited to; Product ID, machine number, spindle number, employee ID)

2 Glass-Polyester Color Identification

To differentiate from the standard fibrous glass package, the finishing ends shall be adhered to the package with a small piece of colored tape

3 Carton Content Label

A content label shall adequately identify each carton.