

R-310 – S-2 Glass® Roving



S-2 Glass® Rovings are specifically designed and intended for filament wound or preimpregnation applications requiring exceptional mechanical, physical, thermal and electrical properties.

General Product Specifications

Product Information

Glass Type	S-2 Glass				S-2 Glass				
	463				449				
Binder	Epoxy				Epoxy, PU				
Resin / Polymer Compatibility	Epoxy				Epoxy, PU				
Filament Diameter - microns	9	9	9	9	9	9	9	9	
Nominal Yield	250	750	750	1250	250	750	1250	2500	
Package	4059	4059	4059	4059	4059	4059	4059	4059	
Input Sliver	SG75	SG75	SG150	SG75	SG75	SG75	SG75	SG75	
Number of Ends	30	10	20	6	30	10	6	3	
Nominal Yield - yd/lb	244	733	733	1222	245	735	1222	2444	
Tex - g/1000 m	2033	677	677	406	2025	675	406	203	
Tex Tolerance +/-	80	29	29	20	80	28	18	14	
Nominal Solids %	1.0	1.0	1.0	1.0	0.65	0.65	0.65	0.65	
Solids Tolerance +/-	0.16	0.16	0.16	0.16	0.1	0.1	0.1	0.1	
Max Catenary - in (cm)	4.5 (11.43)	1.0 (2.54)	1.0 (2.54)	1.0 (2.54)	4.5 (11.43)	1.0 (2.54)	1.0 (2.54)	1.0 (2.54)	
Maximum Moisture (%)	0.03	0.03	0.03	0.03	0.05	0.05	0.05	0.05	
Maximum Fuzz (g)	0.035	0.035	0.035	0.035	0.035	0.035	0.035	0.035	
Package Density Nominal (lb/in ³)	0.047	0.054	0.054	0.054	0.054	0.054	0.054	0.054	
Package Density Tolerance	0.007	0.009	0.009	0.009	0.009	0.009	0.009	0.009	
Package Hardness (Shore 'O')	50 - 90	50 - 90	50 - 90	50 - 90	50 - 90	50 - 90	50 - 90	50 - 90	
Minimum Impregnated Strand	Ksi	450	495	495	450	450	515	450	450
Tensile Strength		MPa	3103	3413	3413	3103	3103	3551	3103

Packaging Information

Package	4059	4059	4059	4059	4059	4059	4059	4059
Nominal Package Weight - lb (kg)	16 (7.25)	16.5 (7.5)	16.5 (7.5)	15 (6.75)	16 (7.25)	16.5 (7.5)	15 (6.75)	15 (6.75)
Nominal Package Length - yards (m)	3875 (3543)	12000 (10973)	12000 (10973)	18000 (16459)	3875 (3543)	12000 (10973)	18000 (16459)	36000 (33098)

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General Product Specifications

Product Information

Glass Type	S-2 Glass			S-2 Glass		
	933			365		
Binder	Epoxy, Phenolic, BMI			Epoxy, PE, VE		
Resin / Polymer Compatibility	Epoxy, Phenolic, BMI			Epoxy, PE, VE		
Filament Diameter - microns	9	9	9	9	9	9
Nominal Yield	310	750	1250	250	750	1250
Package	4059	4059	4059	4059	4059	4059
Input Sliver	SG75	SG75	SG75	SG75	SG75	SG75
Number of Ends	24	10	6	30	10	6
Nominal Yield - yd/lb	307	735	1222	249	746	1222
Tex - g/1000 m	1616	675	406	1992	665	406
Tex Tolerance +/-	130	38	20	91	27	18
Nominal Solids %	0.23	0.23	0.23	0.5	0.5	0.5
Solids Tolerance +/-	0.1	0.1	0.1	0.15	0.15	0.15
Max Catenary - in (cm)	3.5 (8.89)	3.0 (7.62)	4.5 (11.43)	4.5 (11.43)	1 (2.54)	1 (2.54)
Maximum Moisture (%)	0.06	0.06	0.06	0.05	0.05	0.05
Max Fuzz (g)	0.035	0.035	0.035	0.035	0.035	0.035
Package Density Nominal (lb/in ³)	0.055	0.055	0.055	0.050	0.050	0.050
Package Density Tolerance +/-	0.009	0.009	0.009	0.009	0.009	0.009
Package Hardness (Shore 'O')	60 - 110	60 - 110	60 - 110	70 - 90	70 - 90	70 - 90
Minimum Impregnated Strand Tensile Strength	Ksi	450	525	450	450	495
	MPa	3103	3620	3103	3103	3413

Packaging Information

Package	4059	4059	4059	4059	4059	4059
Nominal Package Weight - lb (kg)	16 (7.25)	15 (6.75)	15 (6.75)	16 (7.25)	16 (7.25)	15 (6.75)
Nominal Package Length - yards (m)	5000 (4570)	11000 (10050)	18000 (16459)	3875 (3543)	12000 (10973)	18000 (16459)

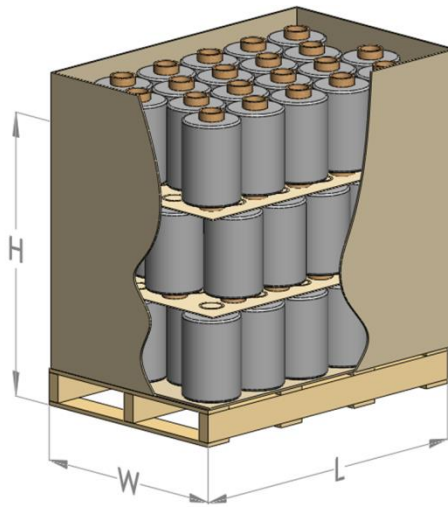
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Nominal Packaging Dimensions

Package	Pallet	Bobbins / Layer	Layers / Carton	Cartons / Pallet	Bobbins / Pallet	L-in (cm)	W-in (cm)	H-in (cm)
4059	Wood	20	3	1	60	45 (114.3)	31 (78.7)	39 (99.1)

WOOD



Storage, Shelf Life and Handling

Storage and Shelf Life:

AGY recommends storing the materials in accordance with appropriate safety considerations, away from exposure to the elements and at 65-80F (18-27C) and 50-70% humidity. If the materials are stored under these conditions, they are stable, non reactive and will not degrade or exhibit negative characteristics for at least 3 years from the date of manufacture. Unused, unopened product older than this is likely still in good condition, however careful evaluation is recommended. Prior to use, pallets should be placed in the production area and any plastic wrap removed for a minimum of 24 hours to allow the material to acclimate to the processing environment. Special care should be given to pallets being moved from a cold environment into a warm, humid area as condensation may occur and this additional moisture can negatively impact the runability of the material, however, once the material has acclimated, this will no longer be an issue.

For product traceability reasons, the pallet label should be recorded or retained.

Handling:

Fiberglass products process best if temperature and humidity are controlled, primarily because this will help to control the buildup of static electricity, fuzz and fly. AGY recommends that the material be run at 70 +/- 5 degrees F and 60 +/- 5% RH.

Test Methods and Certificates

A copy of test methods and or a certificate of conformity may be issued upon request.

Packages will be firmly and evenly wound on the tube, and free from defects in workmanship. AGY accepts no responsibility for damaged material that shows any signs of physical abuse.

For additional product information, refer to PTS M-711

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