# (1) agy <br> strength in materials <br> <br> R-410 - Zentron ${ }^{\oplus}$ Roving 

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Zentron ${ }^{\circledR}$ rovings are designed for filament winding, weaving, pultruding, or pre-impregnation applications requiring superior mechanical, physical, thermal, and electrical properties that also take advantage of the single end (low catenary) construction.

## General Product Specifications

## Product Information

| Product | 758-AC-1400 | 758-AB-675 | 561-AB-675 |
| :--- | :---: | :---: | :---: |
| Glass Type | $\mathrm{S}-2$ | $\mathrm{~S}-2$ | $\mathrm{~S}-2$ |
| Binder | 758 | 758 | 561 |
| Compatibility* | Epoxy, PU | Epoxy, PU | PPS, PEEK, PEKK |
| Filament Diameter - $\mu \mathrm{m}$ | 9 | 14 | 14 |
| Package | 4044 or 4144 | 4044 or 4144 | 4144 |
| Nominal Yield - yd/lb | 1378 | 671 | 671 |
| Tex - g/1000 m | 360 | 739 | 739 |
| Tex Tolerance +/- | 25 | 54 | 54 |
| Nominal Solids - \% | 0.68 | 0.65 | 0.25 |
| Solids Tolerance +/- | 0.25 | 0.29 | 0.16 |
| Maximum Moisture - \% | 0.06 | 0.06 | 0.06 |
| Nominal Package Density - Ib/in ${ }^{3}$ | 0.068 | 0.068 | N/A |
| Package Density Tolerance +/- | 0.025 | 0.025 | N/A |
| Minimum Impregnated Strand Tensile Strength - Ksi | 450 | 450 | N/A |
| Mpa | $(3103)$ | $(3103)$ |  |

## Packaging Information

| Package | 4044 or 4144 | 4044 or 4144 | 4144 |
| :--- | :---: | :---: | :---: |
| Nominal Package Weight - Ib <br> $(\mathrm{kg})$ | 15.5 <br> $(7.03)$ | 15.5 <br> $(7.03)$ | 30.0 <br> $(13.61)$ |
| Minimum Package Weight - Ib <br> $(\mathrm{kg})$ | 10.0 <br> $(4.54)$ | 10.0 <br> $(4.54)$ | 8.0 <br> $(3.63)$ |

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strength in materials

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## Nominal Packaging Dimensions

| Fig | Product | Package | Packages / Layer | Layers / Carton | Cartons / Pallet | Packages / Pallet | $\begin{aligned} & \mathrm{L} \text {-in } \\ & (\mathrm{cm}) \end{aligned}$ | W-in (cm) | H-in (cm) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | $\begin{gathered} \text { Zentron } \\ 758-A B-675 \\ 758-A C-1400 \end{gathered}$ | 4144 | 12 | 3 | 1 | 36 | $\begin{gathered} 45.0 \\ (114.3) \end{gathered}$ | $\begin{gathered} 31.0 \\ (78.7) \end{gathered}$ | $\begin{gathered} 39.0 \\ (99.1) \end{gathered}$ |
| 2 |  | 4044 | 20 | 3 | 1 | 60 | $\begin{gathered} 45.5 \\ (115.6) \end{gathered}$ | $\begin{gathered} 45.5 \\ (115.6) \\ \hline \end{gathered}$ | $\begin{gathered} 37.0 \\ (94.0) \end{gathered}$ |
| 3 | $\begin{gathered} \text { Zentron } \\ 561-A B-675 \end{gathered}$ | 4144 | 11 | 3 | 1 | 33 | $\begin{gathered} 45.0 \\ (114.3) \end{gathered}$ | $\begin{gathered} 31.0 \\ (78.7) \end{gathered}$ | $\begin{gathered} 39.0 \\ (99.1) \end{gathered}$ |



## 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 ( $18-27 \mathrm{C}$ ) 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 minimize the buildup of static electricity, fuzz and fly. AGY recommends that the material be run at $70+/-5$ degrees $\mathrm{F}(18-27 \mathrm{C})$ and $60+/-5 \% \mathrm{RH}$.

## 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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[^0]:    * Compatibility is resin specific, please contact your AGY representative for more details.

