

Georgia Gulf

Data Sheet

Tuf-Stif 2804

Georgia Gulf Tuf-Stif 2804 is a special purpose rigid PVC profile extrusion compound designed for applications requiring the following properties:

- Improved toughness as compared to Tuf-Stif
- Rigidity/Stiffness
- Dimensional Stability
- Durability
- Colorability
- Flame Retardant
- Chemical Resistance

General Properties	Test Method	Typical Value
Specific Gravity (Natural)	ASTM D-792	1.60 ± 0.05
Flammability Classification - Pending	UL-94	V-O at 0.125 inch
Mechanical Properties	Test Method	Typical Value
Tensile Yield Strength, psi	ASTM D-638	6,700
Tensile Modulus, psi	ASTM D-638	600,000
Flexural Strength, psi	ASTM D-790	12,500
Flexural Modulus, psi	ASTM D-790	675,000
Notched Izod, ft-lbs/in (23°)	ASTM D-256	1.0
Hardness, Shore D	ASTM D-2240	80
Hardness, Rockwell R	ASTM D-785	104
Thermal Properties	Test Method	Typical Value
Heat Deflection Temperature at 264 psi, °F (°C)	ASTM D-648	160 (71)
Coefficient of Thermal Expansion, in/in °F	ASTM D-696	2.1 x 10 ⁻⁵

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IMPORTANT: The technical data herein is believed to be accurate. It is offered for your consideration, investigation and verification. These values and sets of properties are based upon laboratory work with small scale equipment and do not necessarily indicate end product performance. Full scale testing and end product use and performance are the responsibility of the Buyer. Buyer assumes all risk of use, storage and handling of the product. NO WARRANTY, EXPRESSED OR IMPLIED, IS MADE INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Nothing contained herein shall be construed as a license to operate under, or recommendation to infringe, any patents.
Typical Value; may not be construed as product specifications.

Processing Information

Georgia Gulf Tuf-Stif 2804 can be processed on conventional rigid vinyl equipment.

Recommended Extruder Size and Screw Design

<u>Screw L/D</u>	<u>Extr. L/D</u>	<u># Feed Flights</u>	<u>Feed Depth (in)</u>	<u># Metering Flights</u>	<u>Metering Depth (in)</u>	<u>Comp. Ratio</u>
60"/2.5"	24:1	5	0.500-0.575	5-12	0.200-0.210	2.0-2.5
84"/3.5"	24:1	5	0.600-0.700	5-12	0.240-0.280	2.0-2.5

Recommended Melt Temperature 370-390°F

Recommended Heat Profile for Start-Up (Barrel Zone Temperatures)

<u>Zone</u>	<u>Temperature</u>
1	300°F
2	310°F
3	320°F
4	330°F
5	340°F
Gate	355°F
Die	355°F

After start-up, temperature adjustments up or down may be necessary until extrusion impact, surface and die flow are acceptable. Adjustments in 5°F increments are recommended. Normally, Zone 1 temperature should not be varied since feed rate may be affected.

A 20/40 mesh screen pack with breaker plate is recommended.