

Technical Data Sheet

HHW-191(6191)

AXIALL's Georgia Gulf HHW-191 (6191) is a special purpose profile extrusion alloy designed for applications requiring the following properties:

- Weatherable
- Impact Strength / Toughness
- Heat Resistance and Thermal Stability
- Chemical Resistance

General Properties	Test Method	Typical Value (English)	Typical Value (SI)
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Specific Gravity	ASTM D-792	1.24	1.24
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Cell Classification	ASTM D-1784	15335	15335
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Mechanical Properties	Test Method	Typical Value (English)	Typical Value (SI)
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Tensile Yield Strength, psi	ASTM D-638	6,700 psi	43.23 MPa
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Tensile Modulus, psi	ASTM D-638	350,000 psi	2415 MPa
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Tensile Impact	ASTM D-1822	45 ft-lbs/in ₂	93.1 kJ/m ₂
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Flexural Strength, psi	ASTM D-790	11,000 psi	75.9 MPa
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Flexural Modulus, psi	ASTM D-790	350,000 psi	2415 MPa
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1/8" Notched Izod Impact Strength, @ (23°C)	ASTM D-256	10 ft-lbs/in	533.9 J/cm
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Hardness, Rockwell R	ASTM D-785	110	110
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Hardness, Shore D	ASTM D-2240	80	80
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Gardner Impact, in-lbs/mil	ASTM D-4226	3 ft-lb/mil	133.5 J/cm
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Thermal Properties	Test Method	Typical Value	
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Heat Deflection Temperature at 264 psi, °F	ASTM D-648	191 °F	89 °C
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Coefficient of Thermal Expansion	ASTM D-696	3.9 x 10 ⁻⁵ in/in °F	7.4 x 10 ⁻⁵ cm/cm °C
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UL Flame Rating	ASTM D-3801	V-1 @ 0.059 in	V-1 @ 1.5 mm
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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, EXPRESS 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, and patents. Reported data are typical values and are not to be construed as product specifications.

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Processing Information

AXIALL's Georgia Gulf HHW-191 is mildly hygroscopic. Drying before extrusion is recommended at 170°F for 2-6 hours to ensure optimum performance and surface characteristics.

Recommended Extruder Size and Screw Design

Screw	Extr.	#Feed	Feed	#Metering	Metering	Comp.
L/D	L/D	Flights	Depth(in)	Flights	Flights	Ratio
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	350°F
Die	350°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.

If a screen pack is used , a 20/40 mesh combination should be sufficient.

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