



Fire Retardant Properties for FR Grade ARPRO[®] Expanded Polypropylene (FR-EPP)

Molded Density Range: 30 to 100 g/l (1.9 to 6.2 pcf)

Available Colors: Black (50XXFR Series) and Charcoal/Grey (34XXCHFR⁺ Series)

Flammability Properties:

Test Method	Units	Results
Federal Motor Vehicle Safety Standard (FMVSS) 302	< 4.0 in/min ¹	Pass
ASTM-E84	Flame Spread Index ²	Class A Rating (per NFPA)
ASTM-E84	Smoke Development Index ²	Class A Rating (per NFPA)
ASTM-E162	Flame Spread Index (Fs)	Class A (I) Rating ² Fs = 10.87 Class B (II) Rating ³ Fs = 56.64
ASTM-E662	Smoke Optical Density(Ds) ^{2,3}	@ 1.5 min = 2.0 to 2.8 @ 4.0 min = 14.5 to 20.3
ASTM-D635 (as referenced in ANSI Z87.1)	Burn Rate	Pass ³
UL-94	Flame Class	V0 ⁴ HB/HBF ⁵ / HF-1 ⁴
FAR 25.853(a) [Appendix F, Part 25]	Burn Rate	Pass ³
CAL-117	Max. % Weight Loss	Pass

Typical values shown, and should not be construed as specification limits.

Note¹: Both EPP (Standard Grade [non-FR]; density >20 g/l) and FR-EPP (all densities) meet FMVSS-302.

Note²: Testing performed on ARPRO FR-EPP at >45 g/l molded density at 25 mm thick.

NFPA (National Fire Protection Association) rating based on test results.

Note³: Testing performed on ARPRO FR-EPP at >30 g/l molded density at 25 mm thick.

Note⁴: Testing performed on ARPRO FR-EPP at 30 to 100 g/l (3.5 to 12.5 mm thick per Std.)

Note⁵: >80 g/l Black, White and Colors of ARPRO EPP Standard Grades [non-FR] are capable of meeting burn rate HB/HBF.

pcf = pounds per cubic foot, g/l = grams per liter



Additional Physical Properties Available Upon Request

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The information contained herein is based upon the results of limited laboratory tests on test samples of material molded from expanded polyolefin resin manufactured by JSP. There can be no assurance that the similar results will be achieved in simulated tests or actual use of commercial product molded by customers of JSP. Product performance may vary substantially depending upon the particular processing involved. The listed properties are listrative only and not the product specifications. All suggestions and recommendations are made without warranty since the conditions of use are beyond JSP's control. Processing and applications of JSP from product specifications. All suggestions and recommendations are made substantiations. SSP disclaims any liability in connection with the use of the information and does not warrant against infringement by reasons of the use of its products in combination with other material or in any process.

