

New Radiflam® HFG1 product family

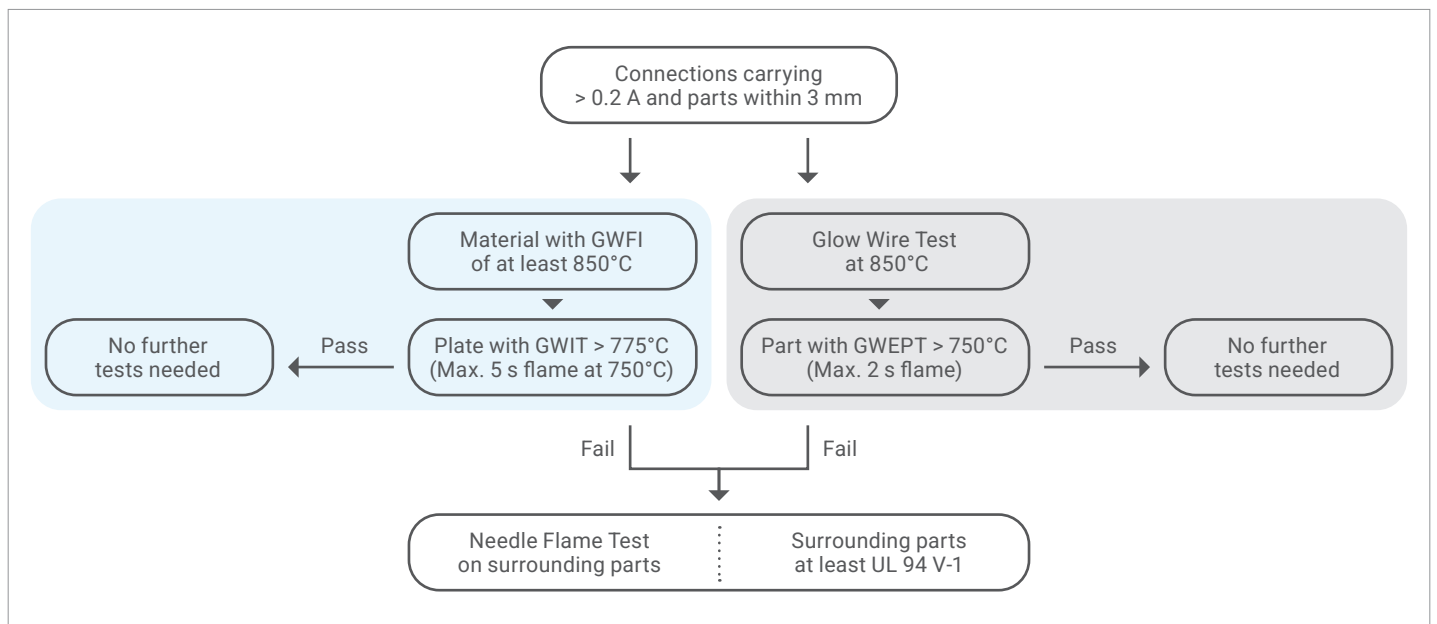
HIGH PERFORMANCE POLYMERS



Appliances: halogen-free polyamide solutions to comply with IEC 60335-1

The **Radiflam® HFG1** product family has been developed to meet the most stringent requirements for **appliance components** in compliance with **IEC 60335-1**. **Radiflam® HFG1** offers improvements in:

- **Sustainability** - by using the most advanced halogen- and red-phosphorus-free flame-retardant system.
- **Safety** - by robustly passing the Glow Wire Ignition Temperature test on sample plates and final components at 750°C with no flames.
- **Productivity** - by reducing tool maintenance compared to traditional HFFR technology.



IEC 60335-1 workflow snapshot highlighting the main steps needed to comply with GWEPT > 750°C for final components (unattended appliances > 0.2 A).

Radiflam® HFG1 product family characteristic properties

	Stress @Break [MPa]	Strain @Break [%]	Tensile Modulus [MPa]	Charpy Notched @23°C [kJ/m²]	Density [kg/m³]	UL 94	CTI [V] IEC 60112	GWFI @0.75 mm [°C]	GWIT @0.75 mm [°C]
Radiflam® A RV250 HFG1	145	2.7	9700	10	1400	@0.4 mm	575	960	800
Radiflam® S RV300 HFG1	150	3.2	11500	12	1450	@0.8 mm	525	960	800
Radiflam® A RV350 HFG1	165	2.4	12800	10	1500	@0.4 mm	600	960	800

VDE Certification



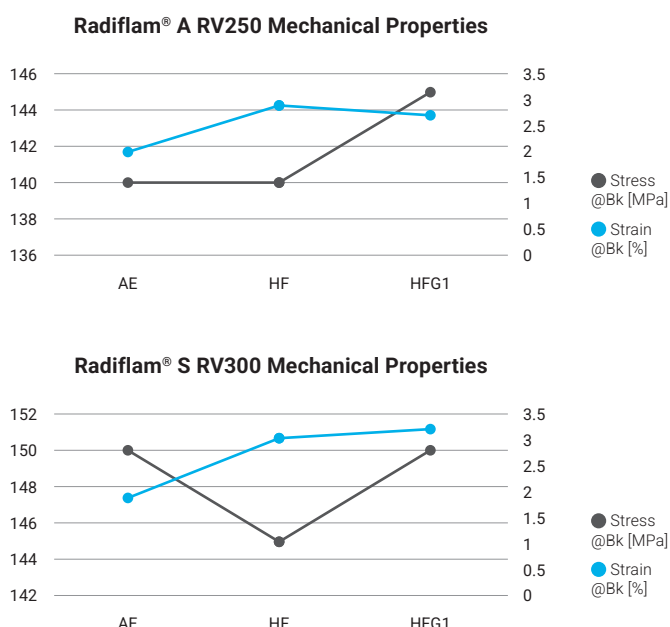
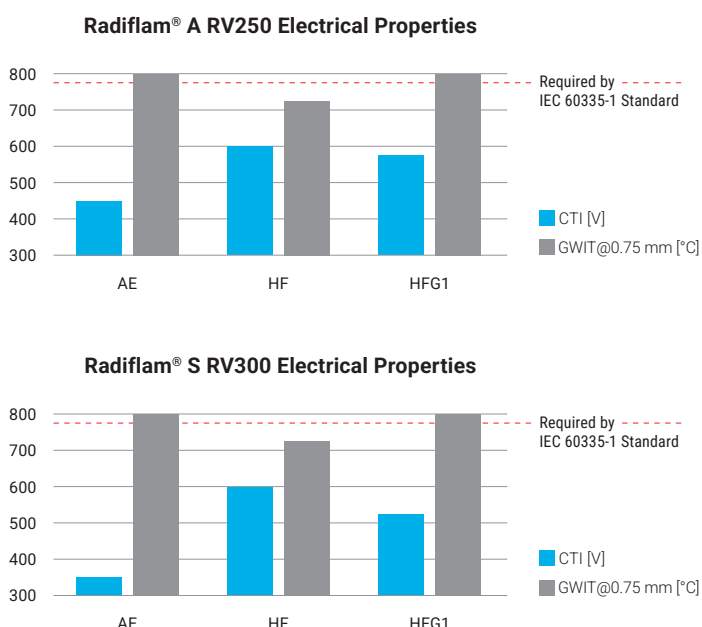
VDE Institute tests and certifies products and materials, providing worldwide recognition and ensuring product safety, electromagnetic compatibility and usability. Electrical insulating materials are tested according to the requirements of IEC 60335 for household appliances: Glow Wire Flammability Index (GWFI), Glow Wire Ignition Temperature (GWIT), Comparative Tracking Index (CTI) and Ball Pressure Test (BPT).

VDE Certificate: No. 40058676

Certificate Holder: Radici Novacips SpA, Via Provinciale, 1331 - IT - 24020 Villa d'Ogna (BG)

	Glow Wire Flammability Index (GWFI) [°C] EN 60695-2-12	Glow Wire Ignition Temperature (GWIT) [°C] EN 60695-2-13	Comparative Tracking Index (CTI) [V] EN 60112	Ball Pressure Test EN 60695-10-2 [°C]
Radiflam® A RV250 HFG1	960 @0.4 mm 960 @0.75 mm 960 @1 mm	775 @0.4 mm 775 @0.75 mm 775 @1 mm	575 uncoloured 600 white 500 black - 600 red	230
Radiflam® S RV300 HFG1	960 @0.4 mm 960 @0.75 mm 960 @1 mm	775 @0.4 mm 775 @0.75 mm 775 @1 mm	475 all colours	200

Radiflam® HFG1: comparison with Radiflam® AE and Radiflam® HF



Radiflam® HFG1 highlights

Main Features	Key Benefits
GWIT > 775°C on specimens	Highest standards for E&E and appliance industries
GWEPT > 750°C on final components	
UL 94 V-0 @0.4 mm	
VDE certification	Fastest time to market for new products
Halogen-and-red-phosphorus-free flame-retardant system	Sustainability
Optimized formulation to reduce corrosion	Improved productivity and reduced maintenance costs



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RADICI NOVACIPS SpA - Via Bedeschi, 20 - IT - 24040 Chignolo d'Isola (BG)

www.radicigroup.com