

Akro-Plastic Akromid® A3 K1 FR black 950089 (2246) PA 6.6 Dry, 25% Glass Filled, Flame Retardant

Categories: [Polymer](#); [Thermoplastic](#); [Nylon \(Polyamide PA\)](#); [Nylon 66 \(PA66\)](#); [Nylon 66, 30% Glass Fiber Filled](#)

Material Notes: Description: AKROMID A3 K1 FR black 950089 (2246) is a 25% glass fiber reinforced, halogen-free flame retardant polyamide 6.6, all color listed at UL. Applications are switch housings in the electric industry.

Additive: Flame Retardant

Features:

- Flame Retardant
- Halogen Free

Uses:

- Electrical/Electronic Applications
- Housings
- Switches

Information provided by Akro-Plastic GmbH

Vendors: No vendors are listed for this material. Please [click here](#) if you are a supplier and would like information on how to add your listing to this material.

Physical Properties	Metric	English	Comments
Density	1.34 g/cc	0.0484 lb/in ³	ISO 1183
Linear Mold Shrinkage, Flow	0.0030 cm/cm	0.0030 in/in	ISO 294-4
Linear Mold Shrinkage, Transverse	0.013 cm/cm	0.013 in/in	ISO 294-4

Mechanical Properties	Metric	English	Comments
Tensile Strength at Break	140 MPa	20300 psi	5 [mm/min]; ISO 527-2
Elongation at Break	2.8 %	2.8 %	5 [mm/min]; ISO 527-2
Tensile Modulus	9.60 GPa	1390 ksi	1 [mm/min]; ISO 527-2
Flexural Strength	225 MPa	32600 psi	2 [mm/min]; ISO 178
Flexural Modulus	9.50 GPa	1380 ksi	2 [mm/min]; ISO 178
Flexural Strain at Break	3.0 %	3.0 %	2 mm/min; ISO 178
Charpy Impact Unnotched <input type="checkbox"/>	>= 5.00 J/cm ² @Temperature 23.0 °C	>= 23.8 ft-lb/in ² @Temperature 73.4 °F	ISO 179/1eU
	>= 5.00 J/cm ² @Temperature -30.0 °C	>= 23.8 ft-lb/in ² @Temperature -22.0 °F	ISO 179/1eU
Charpy Impact, Notched <input type="checkbox"/>	0.900 J/cm ² @Temperature -30.0 °C	4.28 ft-lb/in ² @Temperature -22.0 °F	ISO 179/1eA
	1.00 J/cm ² @Temperature 23.0 °C	4.76 ft-lb/in ² @Temperature 73.4 °F	ISO 179/1eA

Electrical Properties	Metric	English	Comments
Comparative Tracking Index	550 V	550 V	Solution A; IEC 60112

Thermal Properties	Metric	English	Comments
Melting Point	262 °C	504 °F	DSC, 10K/min; DIN EN 11357-1
Flammability, UL94	V-0	V-0	
	@Thickness 0.800 mm	@Thickness 0.0315 in	
Oxygen Index	34 %	34 %	ISO 4589-2
Glow Wire Ignition Temperature	750 °C @Thickness 0.800 mm	1380 °F @Thickness 0.0315 in	IEC 60695-2-13
Glow Wire Flammability Index	960 °C @Thickness 0.800 mm	1760 °F @Thickness 0.0315 in	IEC 60695-2-12

Some of the values displayed above may have been converted from their original units and/or rounded in order to display the information in a consistent format. Users requiring more precise data for scientific or engineering calculations can click on the property value to see the original value as well as raw conversions to equivalent units. We advise that you only use the original value or one of its raw conversions in your calculations to minimize rounding error. We also ask that you refer to MatWeb's [terms of use](#) regarding this information. [Click here](#) to view all the property values for this datasheet as they were originally entered into MatWeb.