

Polysite™ 6643 DMD

1. GENERAL INFORMATION

Polysite™ 6643 is a PET-film covered on both sides with a PET-fleece and is 100% saturated with high-temperature resin. The thermal resistance is Class F. Type 6643 is a three-layer flexible laminate and has excellent heat resistance, electrical and mechanical properties.

The color of this product is blue.

2. TECHNICAL VALUES

Nominal Thickness			[mm]	0,15	0,18	0,20	0,23
Composition	IEC 60626-2 / 4		[μm]	50/50/50	50/75/50	50/100/50	50/125/50
Thickness Film	IEC 60626-2 / 4		[μm]	50	75	100	125
Composition	IEC 60626-2 / 4		[mil]	2-2-2	2-3-2	2-4-2	2-5-2
Thickness Film	IEC 60626-2 / 4		[mil]	2	3	4	5
Area Weight	IEC 60626-2 / 5		[g/m ²]	155	190	225	260
Tensile Strength	MD	IEC 60626-2 / 7	[N/cm]	≥95	≥130	≥150	≥180
	CD	IEC 60626-2 / 7	[N/cm]	≥80	≥105	≥120	≥150
Shrinkage	MD		[%]	1,5	1,5	1,5	1,5
	CD		[%]	1,1	1,1	1,1	1,1
Breakdown Strength	IEC 60626-2 / 10		[kV]	6	7	9	10
Max. Moisture Content	IEC 60626-2 / 12		[%]	1	1	1	1
Temperature Class	IEC 61857		°C	155	155	155	155

Nominal Thickness			[mm]	0,30	0,35	0,42	0,45
Composition	IEC 60626-2 / 4		[μm]	50/190/50	50/250/50	50/300/50	50/350/50
Thickness Film	IEC 60626-2 / 4		[μm]	190	250	300	350
Composition	IEC 60626-2 / 4		[mil]	2-7,5-2	2-10-2	2-12-2	2-14-2
Thickness Film	IEC 60626-2 / 4		[mil]	7,5	10	12	14
Area Weight	IEC 60626-2 / 5		[g/m ²]	350	435	500	560
Tensile Strength	MD	IEC 60626-2 / 7	[N/cm]	≥300	≥350	≥340	≥370
	CD	IEC 60626-2 / 7	[N/cm]	≥200	≥300	≥320	≥350
Shrinkage	MD		[%]	1,5	1,5	1,5	1,5
	CD		[%]	1,1	1,1	1,1	1,1
Breakdown Strength	IEC 60626-2 / 10		[kV]	15	18	20	22
Max. Moisture Content	IEC 60626-2 / 12		[%]	1	1	1	1
Temperature Class	IEC 61857		°C	155	155	155	155

3. STORAGE AND AVAILABILITY

- Shelf life is 18 months from EXW date in original packing and under normal conditions (room temperature, 50% relative humidity)
- Standard width is 1000 mm
- Available from 10 mm width upwards

4. NOTES

All statements, technical information, and recommendations contained in this document are based on tests or experience that we believe are reliable. However, many factors beyond our control can affect the use and performance of a product in a particular application, including the conditions under which the product is used and the time and environmental conditions in which the product is expected to perform. Since these factors are uniquely within the user's knowledge and control, it is essential that the user evaluates the product to determine whether it is fit for a particular purpose and suitable for the user's method or application.

Values presented have been determined by standard test methods and are average values not meant to be used for specification purposes. Tolerances on thickness and area weight are +/- 15% if not stated differently.

All questions of warranty and liability relating to our products are governed by the terms of the respective sale subject, where applicable, to the prevailing law.

Polysite™ is a trademark of MaterialPartner Technische Werkstoffe GmbH.

5. VERSIONING

Rev. 2 dated 16/07/2026