

## Laminates

### Rigidiso® RI 40103

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**Composition:** Rigidiso® RI 40103 is a laminate made of phenolic-cotton and conforms to the following standards:

IEC 60893	PF CC 204
DIN 7735	HGW 2083.5
BS (GB)	2572-F5
NEMA L1 (USA)	LE
NF C26 (F)	150CC
MIL SPEC	24768/13

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**Properties:** Rigidiso® RI 40103 is insulating up to insulation class E (120°C), furthermore it has very good mechanical properties. In addition to that it is environmentally neutral, free of asbestos, dioxin, cadmium and halogen. Rigidiso® RI 40103 is designed in accordance with flammability class UL 94 level HB.

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**Applications:** Rigidiso® RI 40103 is used as construction material with higher requirements to the insulation properties.

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**Delivery forms:** Rigidiso® RI 40103 is available in thicknesses of 0.5 mm – 80 mm as well as sheet (2440 x 1220 mm and 1150 x 2200 mm with a max. sheet size of 2440 x 1240 mm). Furthermore Rigidiso® RI 40103 can also be delivered as cut, milled, die-cut or water-jet cut parts. In addition it can be equipped with a special varnish to meet a CTI of more than 600.

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## Rigidiso® RI 40103

**Standard colour:** Rigidiso® RI 40103 is delivered in brown colour.

**Storage conditions:** Rigidiso® RI 40103 is durable unlimited under normal conditions (20°C, 50% rel. air humidity).

Property	Test method	Unit	Value
Density	ISO 1183 / A	g/cm <sup>3</sup>	ca. 1.4
Elasticity module of flexural test	ISO 178	Mpa	7 x 10 <sup>3</sup>
Tensile strength	ISO 527	Mpa	80
Limiting temperature	IEC 216	°C	110
Comparative tracking index	DIN / IEC 112	CTI	100
Thermal conductivity	DIN 52612	W/mK	0.2
Thermal class	IEC Publ.85	Level	E
Water absorption (5mm)	ISO 62 / 1	mg	130
Flexural strength untreated at 23°C	DIN 53452	MPa	130
Impact resistance a <sub>n10</sub> and a <sub>n15</sub>	DIN 53453	kJ/m <sup>2</sup>	30
Notch impact resistance ak <sub>10</sub>	DIN 53453	kJ/m <sup>2</sup>	11
Notch impact resistance ak <sub>15</sub>	DIN 53453	kJ/m <sup>2</sup>	15
Pressure resistance	DIN 53454	MPa	150
Splitting strength	DIN 53463	N	2500
Resistance between plugs after 24 hours water storage at 23°C	DIN 53482	Ohm	10 <sup>7</sup>
1 Minute test voltage in layer direction at 90°C after pre-treatment	DIN 53481	kV	25
1 Minute test voltage vertical to layer at 90°C after pre-treatment	DIN 53481	kV	5
Dielectric constant	DIN 53483	-	5
Limiting value of limiting temperature according to flexural strength	-	MPa	65
Incandescence resistance	DIN 53459	Level	2b
Coefficient of linear expansion	VDE 0304/2	10 <sup>-10</sup> /K	20 - 40

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## Rigidiso® RI 40103

<b>Thickness</b>	0.3	0.5	0.8	1.0	1.5	2.0	2.5	3.0	3.5	4.0
<b>Availability</b>	○	●	●	●	●	●	●	●	●	●

<b>Thickness</b>	4.5	5.0	6.0	7.0	8.0	9.0	10.0	11.0	12.0	13.0
<b>Availability</b>	●	●	●	●	●	●	●	●	●	●

<b>Thickness</b>	14.0	15.0	16.0	17.0	18.0	19.0	20.0	21.0	22.0	25.0
<b>Availability</b>	●	●	●	●	●	●	●	●	●	●

<b>Thickness</b>	30.0	35.0	40.0	45.0	50.0	60.0	70.0	80.0	90.0	100.0
<b>Availability</b>	●	●	●	○	○	○	○	○	○	○

- Pre-material on stock
- Delivery time pre-material 2 weeks

**Trademark Information:** Rigidiso® is a registered trademark of the company Dr. Dietrich Müller GmbH, Germany.

**Please note:** The information in this data sheet is based on our current knowledge and experience. They do not disengage the fabricator and user from own tests and inspections because of the plenty of possible effects. There is no judicial binding assurance of certain properties or of the qualification for a concrete application in our declaration. We recommend consulting us in individual cases. The acceptor of our products has to observe possible industrial property rights as well as present laws by himself

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