

# Electrical Insulation Material

## Flexiso<sup>®</sup> NMN 8 FI 14040

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**Structure:** Flexiso<sup>®</sup> NMN 8 FI 14040 is a flexible three-layer material, which consists of a layer of polyester film that is laminated with a layer of calendered aramid paper with a thickness of 80 microns on both sides. Flexiso<sup>®</sup> NMN 8 FI 14040 is used for applications up to 155°C.

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**Characteristics:** Flexiso<sup>®</sup> NMN 8 FI 14040 is an insulating material of insulation class F (155°C) with particularly good mechanical properties, such as tensile strength and edge tear resistance combined with high dielectric strength. It also has a smooth surface and therefore it can also be processed into fully automated production lines.

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**Application:** Flexiso<sup>®</sup> NMN 8 FI 14040 is mainly used in electrical motors as slot insulation and slot closure as well as phase insulation. Flexiso<sup>®</sup> NMN 8 FI 14040 is also used in the transformer construction as core, layer and cover insulation.

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**Form of Supply:** Flexiso<sup>®</sup> NMN 8 FI 14040 is available on rolls (max width 900 mm) and tapes (from 10 mm wide). Other formats, for example, blanks, die-cut and formed parts are produced according to customer specifications.

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**Storage Conditions:** Flexiso<sup>®</sup> NMN 8 FI 14040 can be stored unlimited under normal conditions (20°C, 50% rel. air humidity)

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## Flexiso® NMN 8 FI 14040

Properties	Norm	Unit	Value				
			0.19 ± 0,02	0.20 ± 0,02	0.22 + 0,03 - 0,01	0.24 + 0,03 - 0,01	0.26 ± 0,03
Total Thickness	IEC-626-2	mm					
Film Thickness	IEC-626-2	µm	23	36	50	75	100
Basis Weight	IEC-626-2	g/m <sup>2</sup>	194	212	232	267	302
Tensile Strength:							
Lengthwise	IEC-626-2	N/mm <sup>2</sup>	≥160	≥180	≥200	≥250	≥280
Crosswise			≥100	≥140	≥180	≥230	≥260
Elongation:							
Lengthwise	IEC-626-2	%	≥20	≥20	≥20	≥20	≥20
Crosswise			≥20	≥20	≥20	≥20	≥20
Dielectric Strength	IEC-626-2	kV	≥7	≥8	≥9	≥12	≥13

Properties	Norm	Unit	Value				
			0.30 ± 0.02	0.36 ± 0.02	0.42 ± 0.03	0.48 ± 0.03	0.53 ± 0.05
Total Thickness	IEC-626-2	mm					
Film Thickness	IEC-626-2	µm	125	190	250	300	350
Basis Weight	IEC-626-2	g/m <sup>2</sup>	337	427	512	582	652
Tensile Strength:							
Lengthwise	IEC-626-2	N/mm <sup>2</sup>	≥300	≥380	≥380	≥450	≥450
Crosswise	IEC-626-2		≥280	≥340	≥340	≥420	≥420
Elongation:							
Lengthwise	IEC-626-2	%	≥20	≥20	≥20	≥20	≥20
Crosswise	IEC-626-2		≥20	≥25	≥25	≥25	≥25
Dielectric Strength	IEC-626-2	kV	≥15	≥20	≥23	≥25	≥28

Thickness	0,22	0,24	0,30	0,36	0,42	0,48	0,53
Availability	●	●	●	●	●	●	●

Dr. Dietrich Müller GmbH

## Flexiso® NMN 8 FI 14040

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

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**Information:**

The information in this Technical Data Sheet is based on our present knowledge and experiences. It does not release the user from conducting their own trials and examinations to determine the suitability of the product for his intended use. A legally obligatory warranty of certain characteristics or the suitability for a specific targeted application cannot be derived from our data. Depending upon individual cases we recommend consultation with us. Any patent rights as well as existing laws are to be considered by the receiver of our products as their own responsibility.

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