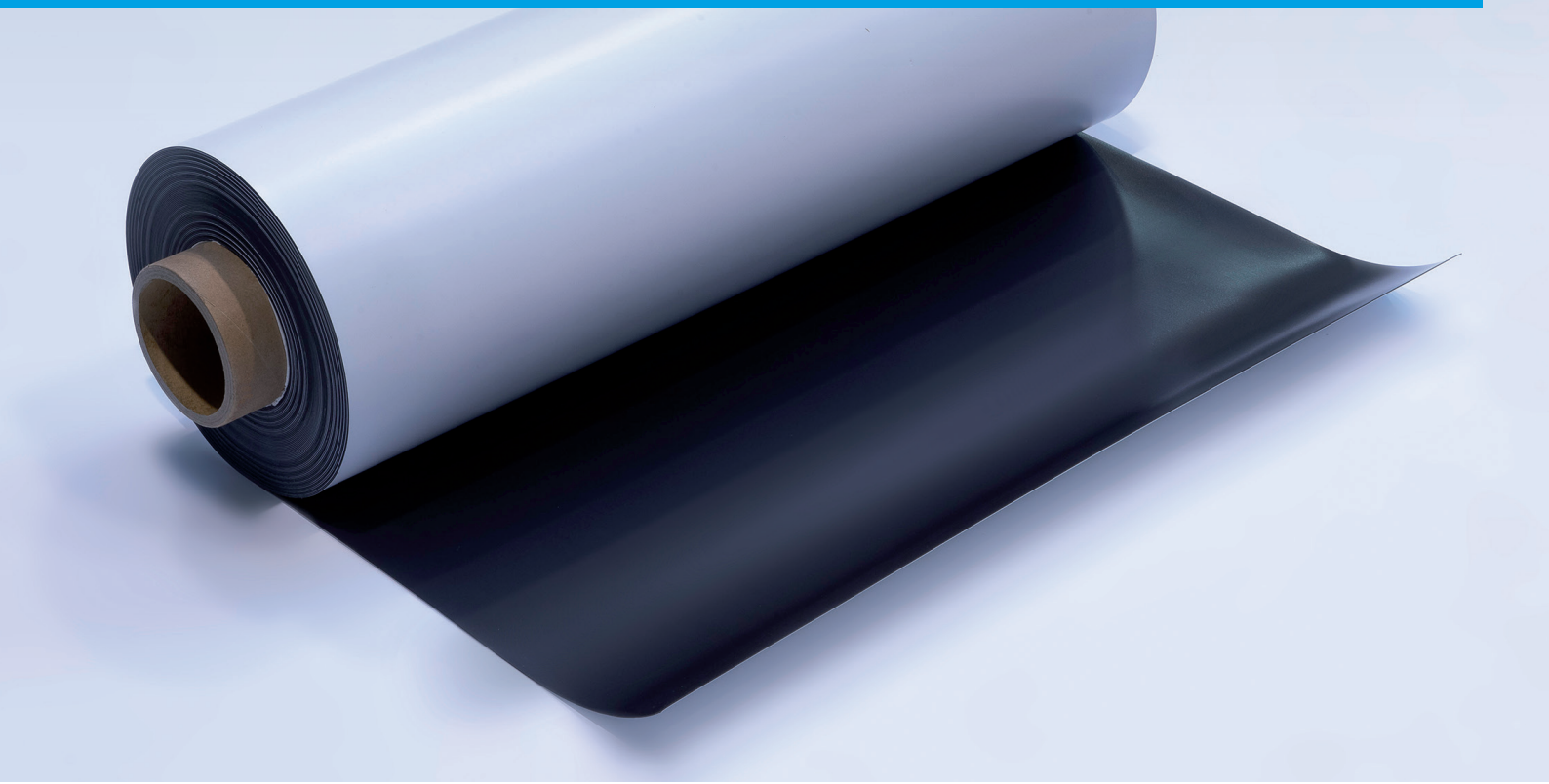
Materials Services I Materials Germany

Semi-anisotropic magnetic foil

Printable, PVC-coated, matt white

thyssenkrupp



Function

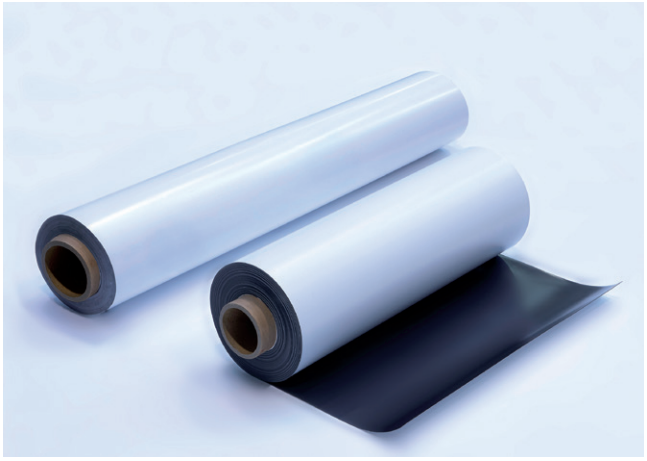
This PVC-coated semi-anisotropic magnetic foil consists of a compound of rubber-like, flexible plastic and powdered ferrite magnetic material. It can be printed on the PVC-coated side using a digital printing process and adheres to all ferrous surfaces thanks to its multipolar strip magnetized back. The magnetic side is also equipped with a matt UV-hardened coating.

Benefits

The magnetic foil is easy to print and can be cut using punching and cutting machines, scissors and knives. This presents a wide range of design possibilities. Irrespective of its size, the magnetic foil is highly versatile, as it can be used and reused as often as required at different locations. The magnetic foil retains its permanent magnetic properties – if stored correctly – even when not used for a longer period of time. In addition, the nature of the magnetic foil makes it easy to handle, thus ensuring easy assembly and replacement on site.

Possible fields of application

Magnetic advertising posters for metallic (ferromagnetic) surfaces, shop and trade fair construction as well as vehicle lettering and advertising.



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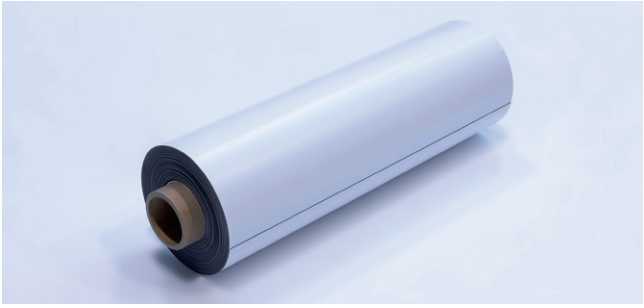
Material properties

Temperature range	-20 °C to +70 °C
Flexibility	Can be wound or bent around a diameter as little as 13 mm at 20°C without cracking.
Hardness	Shore D 45 ±5 at a room temperature of 23°C
Density	3.6 g/cm³ (±0.2 g/cm³)
Pole spacing	Foil thickness 0.35 mm: Pole spacing 1,5 mm Foil thickness 0.5–0.85 mm: Pole spacing 2 mm Foil thickness 1.1 mm: Pole spacing 2.5 mm
Print	Eco-solvent, solvent and UV printing
Storage	Optimally at approx. 20–30°C and approx. 40–60% humidity. Please note: Protect from direct sunlight in closed packaging!
Outdoor application	The magnetic foil can be used outdoors. However, exposure to high humidity, UV rays, (sub)tropical or desert-like conditions may cause a significant and rapid reduction of the shelf life.

Magnetic properties

Remanence (Br)	≥ 160 mT
Coercivity (HcB)	≥ 95 kA/m
Coercivity (HcJ)	≥ 143 kA/m
Energy product (BHmax)	4.78 – 6.37 kJ/m³



Product range

Part no.	Thick-ness* [mm]	Width [mm]	Length [m]	Holding force** [g/cm²]	Weight [kg]
M20004600B621N	0.35	1000	30	≥ 13	36
M20004200B621N	0.50	615	30	≥ 20	33
M20004700B621N	0.50	1000	20	≥ 20	35
M20004300B621N	0.60	615	30	≥ 26	39
M20004800B621N	0.60	1000	20	≥ 26	42
M20004400B621N	0.85	615	10	≥ 42	23
M20004500B621N	1.10	615	15	≥ 52	38

* The thickness refers to the total thickness, i.e. the thickness of the magnetic foil including the thickness of the PVC coating (0.1 mm).

** The holding forces on a flat polished plate made of S235JR (St 37) with a thickness of 10 mm have been determined at room temperature using vertical withdrawal of the magnet.

Other dimensions, holding forces or coatings (e.g. PET, self-adhesive, uncoated) are also available on request. We will be happy to advise you on this.

Contact

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