



Plastirol
part of PAG

PlastiPET Black NIR

Description

Plastirols Amorphous Polyethylene Terephthalate (APET) black NIR is a polymer used for the packaging industry. It has good stiffness. Plastirol has different grades, suitable for high-end foodpackaging, for cosmetic applications and technical applications. This grade does not contain carbon black and is therefore good detectable by waste sorting systems

Key features

Certifications

The following approvals are available. FSSC 22000, standard 10/2011 EC and its amendments.

Printing

PlastiPET Black could be used for printing. This although needs specific treatment. Please contact our sales department in case printing is required for your application.

Conversion

Glueing of the film can be done with hotmelt or solvent-based glue. For welding applications (Thermal or ultrasonic) Plastirol has a specific grade available, PlastiPET weldpet, please contact our sales department.

Product Availability

Colour

Black

Finish

Standard natural gloss. Surface matting by additive possible

Physical properties

Physical properties	Standart	Unit	Value
Mechanical properties			
E-Modulus	ISO 527	MPa	2200
IV value		DI/g	0,70 - 0,80
Thermic properties			
Vicat VST/B/50	ISO 306	°C	77
Other properties			
Specific weight	ISO 1183	g/cm ³	1,32
Water vapour transmission	ASTM - F1249	g/m ² /24h	7 *)
Permeability CO ₂	ASTM - D1434	cm ³ /m ² -h-bar	125 *)
Permeability O ₂	ASTM - D1434	cm ³ /m ² -h-bar	40 *)
*) 0,40 mm film			
Haze value			
Virgin	haze	%	N/A
Recycled	haze	%	N/A

Overall Migration test	Simulant	Test condition	Result
Dry, non fatty food	E. Tenax	10 days, 40 °C	suitable
wet and aqueous food	A. Water	10 days, 40 °C	suitable
sauer food, yoghurt, sauce	B. 3% acetic acid	10 days, 40 °C	suitable
alcoholic drinks, milk	D1. 50% ethanol	10 days, 40 °C	suitable
chocolate, cookies, fatty food	D2. 100% vegetable oil	10 days, 40 °C	suitable

Manufacturing Tolerances

Film thickness	0.21 to 0.40	0.41 to 0.80	0.81 to 1.20	1.21 to 1.50
thickness	+/- 7%	+/- 5%	+/- 4%	+/- 3%
Width	+/- 1mm	+/- 1mm	+/- 2mm	+/- 2mm

Available options

Antiblock, internal or external
 Antifog treatment
 ESD coating
 Coextrusion

Additional information**Storage**

We recommend to store our films with a maximum of 12 months after delivery without any UV exposure. Air humidity between 20% and 70%, temperature between 15 and 25 degrees Celcius.

Recycling Circular

PlastiPET Black NIR recycled grade is produced with high content of recycled material (30% - 70%), to ensure optimal use of waste materials. Plastirol will facilitate the return of your regrind on demand.

Thermoforming

To keep PlastiPET Black NIR clear we recommend sheet temperatures of 120 – 165 degrees Celcius. To keep the shrink as low as possible we recommend mould temps around 60 degrees Celcius. Overheating of PlastiPET Black NIR has negative effect to the film because it will start crystallising.

Chemical resistance

PlastiPET Black NIR shows a good resistance to aqueous solutions of salt, acid and alkalis. It also has good resistance to most solvents, alcohols, fats and oils, although very limited to ketones.

Visual aspects

black spots PlastiPET black NIR (virgin)
 black spots PlastiPET black NIR RQ (recycled grade)

0 - 299	300 - 500	501 - 999	≥ 1000	*)
N/A	N/A	N/A	N/A	
N/A	N/A	N/A	N/A	

*) values refer to a diameter of a circle, in micron measured

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Disclaimer

Above information is based on our current knowledge and experience. In view of the many factors that may affect processing and application, these data do not relieve processors from the responsibility of carrying out their own tests and experiments; neither do they imply any legally binding assurance of certain properties or of suitability for a specific purpose. It is the responsibility of those to whom we supply our products to ensure that any proprietary rights and existing laws and legislation are observed.