

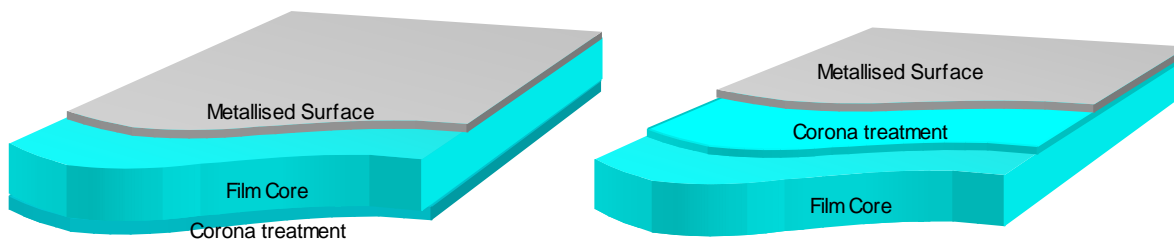
Metallized

PXM

Data Sheet (November 2021)

Product description

Nuroll PXM is a bi-axially oriented polyester film, one side corona treated, one side metallized, designed for flexible packaging applications where high barrier properties are required



PXM standard metallization is on untreated side with corona treated surface free for printing and/or lamination.

Metallization on corona surface is possible on request.

Plasma treatment is possible on request.

Main Applications

All flexible laminated packages for high barrier applications: coffee, dehydrated food, frozen food, snacks, etc.

Recommendations

-Unprotected metallized side must be not in contact with foods

-PXM is not suitable for pasteurization

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Technical details

Nuroll PXM is usually supplied with following characteristics:

- **Core diameter:** 6 inches (152.76 mm)
- **Film width:** min 600 mm, max 2400mm. Other widths to be agreed.
- **Film length:** According with film thickness, max external reel diameter (640mm), max reel weight (1000 kg)

| Film Thickness (microns) | 12 | 15 | 19 | 23 | 36 | 50 |
|--------------------------|-------|-------|-------|-------|------|------|
| Standard reel length (m) | 24000 | 12000 | 10000 | 12000 | 8000 | 4000 |
| | 36000 | | 15000 | | | |

- **Packing presentation:** suspended reel; wooden endboards, lid and pallet; stretchable PE film

Different characteristics than the above on request

Storage conditions

Nuroll PXM need to be stocked in a close warehouse and preserved from the light and from the humidity.

Reels must be not stacked.

Nuroll will not guarantee and accept any responsibility for material older than 1 year from the delivery.

Compliance with regulations

Polyester Film produced by Nuroll SpA, complies with EEC, Italian and FDA requirements on packaging for direct contact with foodstuffs

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| Properties | | Unit | Test Method | Typical values | | | | | | |
|---------------------------------|--|------------------------|-------------------|----------------|---------|---------|---------|---------|---------|------|
| Thickness | | Microns | ASTM E 252 | 12 | 15 | 19 | 23 | 36 | 50 | |
| Density | | g/cm ³ | ASTM D1505 | 1,395 | 1,395 | 1,395 | 1,395 | 1,395 | 1,395 | |
| Standard Optical Density | | O.D. | Gilex (Macbeth) | 2,2-2,4 | 2,2-2,4 | 2,2-2,4 | 2,2-2,4 | 2,2-2,4 | 2,2-2,4 | |
| Yield (nominal) | | m ² /kg | ASTM E 252 | 59,2 | 46,8 | 37,3 | 31,2 | 19,9 | 14,5 | |
| | | g/m ² | ASTM E 252 | 16,9 | 21,4 | 26,8 | 32,5 | 50,2 | 68,9 | |
| Tensile strength | | MD | N/mm ² | ASTM D 882 | 220 | 220 | 230 | 230 | 230 | 230 |
| | | | kg/inch | | 6,8 | 8,6 | 11,1 | 13,5 | 20,5 | 27,4 |
| | | TD | N/mm ² | | 250 | 250 | 240 | 240 | 240 | 240 |
| | | | kg/inch | | 7,4 | 9,5 | 12,1 | 14,3 | 21,8 | 29,8 |
| Elongation at Break | | MD | % | ASTM D 882 | 130 | 130 | 130 | 130 | 140 | 140 |
| | | TD | | | 110 | 110 | 120 | 120 | 130 | 130 |
| Thermal Shrinkage 150°C-30' | | MD | % | ASTM 1204 | 1,3 | 1,3 | 1,3 | 1,3 | 1,4 | 1,4 |
| | | TD | | | 0,8 | 0,8 | 0,6 | 0,6 | 0,8 | 0,8 |
| C.O.F | | Film/Film | ASTM D1894 | 0,4 | 0,4 | 0,4 | 0,4 | 0,4 | 0,4 | |
| MVTR (38°C, 90%RH) | | g/m ² *day | ASTM E398 | 0,5 | 0,5 | 0,5 | 0,5 | 0,5 | 0,5 | |
| OTR (20°C, 0%RH) | | cc/m ² *day | ASTM D3985 | 1 | 1 | 1 | 1 | 1 | 1 | |
| CO ₂ TR (20°C, 0%RH) | | cc/m ² *day | Internal method | 5 | 5 | 5 | 5 | 5 | 5 | |
| N ₂ TR (20°C, 0%RH) | | cc/m ² *day | Internal method | 1 | 1 | 1 | 1 | 1 | 1 | |

*Others optical density on request

⇒ For thicknesses different than those reported above it is necessary to agree a minimum order and to full chart the mother roll width

1. This information is the best currently available on product and it is subject to revision as additional knowledge and experience is gained.
2. The results obtained and the above properties refer to average value of laboratory tests. Therefore, such results have only to be considered as an indicative general guide to material properties and not as an implied guarantee that the product actually has said properties and/or a warranty of fitness for a particular purposes and/or suggestion for infringement of any existing patents.
3. Due to many factors which may affect customer production process, including but not limited by different equipments and techniques used, PXM film must be qualified before being used in any application.