

## Films for tubes: TB serie

The films of this serie are polyethylene-based high barrier films, mainly used to form flexible tubes intended for the packaging of liquid or pasty cosmetic products. Available in transparent or white version.

### Key features

- Tolerances on total thickness absolutely precise
- The high barrier allows an increasing shelf life of the products, preventing loss of aromas
- Excellent smoothness, flexibility and gloss
- Easy to print and / or metallize
- Wide window seal and high hot tack

The specific technology adopted by ITP allows to obtain high thicknesses while keeping excellent product stability, as required in the following processing stages. On request,

different surface finishes and different colors are available. The films are manufactured with raw materials conforming to European Union standards for food packaging. More detailed informations are available on request.

Film quality is ensured by the considerable experience gained by Industria Termoplastica Pavese S.p.A. in the production of special packaging materials. This quality has been certifying according to ISO 9001:2008 standard since 1994.

CHARACTERISTICS	METHOD	UNITS	VALUE*
Total thickness	IO CTR 109	µm	250 - 400
Grammage	ITP	g/m <sup>2</sup>	238 - 388
Density	---	g/cm <sup>3</sup>	0.950-0.970
Minimum sealing temperature	--	°C	120
Oxygen transmission rate (O <sub>2</sub> TR) 20°C 65%RH	ASTM D-3985 ASTM F-1927	cm <sup>3</sup> /(m <sup>2</sup> ·24h·bar)	<0,5
Water vapor transmission rate 38°C 90%RH	ASTM F-1249	g/(m <sup>2</sup> ·24h·bar)	1-2
EVOH possible thicknesses		µm	12÷30

\*these values are indicative but not limitative of the typical characteristics of the film. Exceptions to the reported range can be achieved.



## Warning

### Storage precautions

Keep the rolls in their original packaging in dry environment, protected from sunlight and atmosphere agents, at a temperature of 20 (+/-10) °C. Store the material in working environment at least 24 hours before using.

Recommended use (shelf life): within 6 months from production date. Exceptions to this period, when the material is correctly stored, have been successfully experimented.

### Precautions for use

The information provided in this publication has to be considered true and accurate at the time of publication; the data are average figures for the ideal use of our material. They have been obtained using laboratory specimens and equipments. The publication of this information, however, does not represent a guarantee for further delivery.

The customer should take care to determine the suitability of such product for the intended use.