

## TERMAX: TECHNICAL PROPERTIES

PROPERTY	RELATED REGULATION	INFLUENCE ON PRODUCT QUALITY
<b>*CHARACTERISTIC*</b>		
<b>Substance</b>	ISO 536	Intrinsic property related to the customer's requirements. For paper in reels, substances somewhat below the nominal values are established in order to increase productivity. Some papers (coated, bulk, thermal paper) prioritize thickness over substance with the aim of meeting specific objectives concerning the final measurements of the spine or small reels.
<b>Thickness/Caliper</b>	ISO 534	Intrinsic property related to the customer's requirements. For paper in reels, substances somewhat below the nominal values are established in order to increase productivity. Some papers (coated, bulk, thermal paper) prioritize thickness over substance with the aim of meeting specific objectives concerning the final measurements of the spine or small reels.
<b>Whiteness-D65/C2</b>	ISO 11475/ISO 11476	Property related to the appearance of the product. Greater whiteness tends to be associated with higher quality. As visual perception of this property depends on the kind of illuminant used, 2 different conditions are typically used for measuring, exterior light (D65 sunlight) and interior light (C2 fluorescent).
<b>*RUNNABILITY*</b>		
<b>Absolute/relative humidity</b>	ISO 287/Tappi T502	Absolute humidity is a measure of the water content of the paper (manufacturing control). Relative humidity denotes the moisture content of the paper balanced with environmental conditions. Moisture content in balance with the environmental conditions of operation areas allows for a print free of movements and disruptions and avoids problems of curl during operation. Paper subjected to operation processes at high temperatures (rotary, laser printing, silk screen printing, etc.) requires lower humidity in order to avoid curling or blistering.
<b>Traction resistance</b>	ISO 1924-2	Properties of resistance which improve the features of paper in reels during operation and have an influence on: -tension in rotary printing and folding -rupture of the paper web in products of low substance and during matrix stripping
<b>*PRINTABILITY*</b>		
<b>Smoothness/Roughness</b>	ISO 5627/ISO 8791-4	Influences the quality of the printed product. Surface structure and roughness determine the amount of ink needed for a good print, absorption of the ink, and the reflective character of the print, having an effect on the ink gloss. In semi-matt coated paper (according to its roughness range) it has a particular influence on resistance to rubbing of printed ink and consequently on the occurrence of offsetting problems. The measuring system depends on the smoothness range: - Bendtsen smoothness for rougher paper (uncoated, matt coated, carbonless, thermal) - Bekk smoothness for smoother paper (gloss and semi-matt coated, cast-coated, metallized) - Parker roughness: measures the state of the surface in conditions of pressure when printing, as smoothness in these conditions varies as a function of the greater or lesser compressibility of the paper.
<b>*APPLICATION*</b>		
<b>Heat resistance</b>	TP/ME-31-A-86	Properties applicable to both pre-printing and thermal printing that determine the stability of these agents (temperature-humidity-light) in different conditions. They are related to problems concerning damage to the print (erasure or color change) and with blackening of the surface.
<b>Moisture resistance</b>	TP/ME-31-A-86	
<b>Light resistance</b>	TP/ME-31-A-86	

\*RELATED REGULATION: Those used as a reference for developing the test method

\*TEST METHOD: Documented analytic procedure for measuring or quantifying the property

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