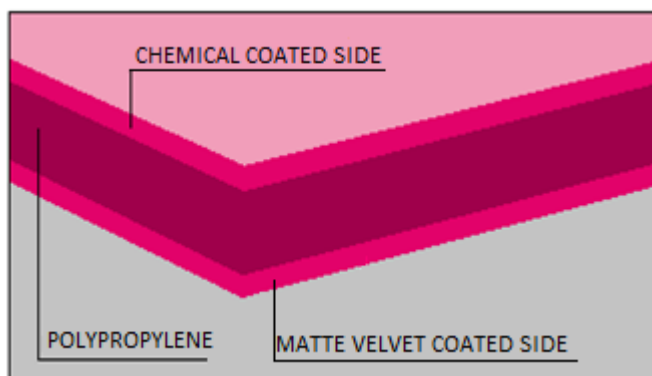


## TECHNICAL DATA SHEET

### K 2 1 U L T R A S O F T

**K21 ULTRASOFT** is a bioriented polypropylene film with one side (*outside*) matte and coated with a special laquer lending a velvet tactile effect; the other side is chemical coated.

*This film complies with EN-71 (declaration on request). This film is not suitable to come into direct contact with food.*



#### TYPICAL TECHNICAL FEATURES <sup>(1)</sup>

PHYSICAL PROPERTIES		METHOD	UNIT	VALUE <i>code 172/02</i>
Thickness		ASTM D374-C	µm	21 ± 1,05
Grammage		Internal	g/m <sup>2</sup>	18,8
Surface tension	chemical side	ASTM D2578	dyne/cm	38
	matte side			≥ 44

MECHANICAL PROPERTIES		METHOD	UNIT	VALUE <i>Code 172/02</i>
Tensile strength at break	MD	ASTM D882	Kg/cm <sup>2</sup>	800 - 1.100
	TD			2.100 - 2.400
Elongation at break	MD	ASTM D882	%	135 - 175
	TD			20 - 60

THERMAL PROPERTIES		METHOD	UNIT	VALUE <i>code 172/02</i>
Thermal shrinkage (120°C/5min)	MD	ASTM D1204	%	2 - 4
	TD			1 - 2

OPTICAL PROPERTIES		METHOD	UNIT	VALUE <i>code 172/02</i>
Haze		ASTM D1003	%	85 - 95
Gloss (velvet side)	45°	ASTM D2457	GU	< 9

<sup>(1)</sup> The information and data contained herein are to be used only as a guideline; therefore, ULTRALEN FILM GmbH doesn't offer any guarantee on their absolute truthfulness and doesn't accept any liability arising out of their use.

#### ULTRALEN FILM GmbH

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#### *STORAGE*

Store the material in a dry location (preferably with RH < 50%) at a constant temperature between 20°C and 30°C. Do not leave it exposed to direct sunlight or atmospheric agents.

Partially used reels have to be repacked as originally supplied.

#### *WARRANTY*

Material processability is guaranteed up to 3 months since shipment date, as long as it is stored correctly.

It is recommended to condition the material at room temperature at least 24 hours before its use.

#### *DISCLAIMERS*

ULTRALEN FILM GmbH gives no warranty, expressed or implied, as to the suitability of the material for a specific application or characteristic use. An industrial homologation test of the material in actual conditions of purpose is always needed in order to verify its suitability for the specific application or characteristic use. Before using the material, it is advisable to check the compatibility of the inks and adhesives to be purposed with the type and level of its treatment.

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