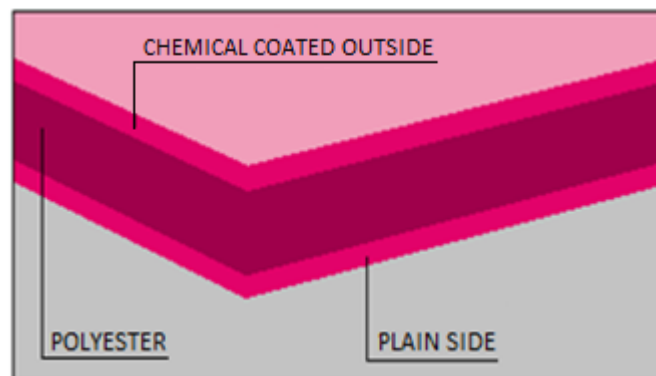


TECHNICAL DATA SHEET

K12 PET CHEMICAL

K12 PET CHEMICAL is a transparent bioriented polyester film with one side chemical coated and the other side plain.

This film is suitable to come into contact with food (declaration on request).



TYPICAL TECHNICAL FEATURES ⁽¹⁾

PHYSICAL PROPERTIES		METHOD	UNIT	VALUE	
				<i>code 440/45</i>	<i>code 440/63</i>
Thickness		Internal	µm	12 ± 0,2	12 ± 0,2
Grammage		Internal	g/m ²	16,78 ± 0,28	16,77 ± 0,84
COF (<i>film/film</i>)	dynamic	ASTM D1894	-	0,32 - 0,36	0,35 - 0,45
	static		-	0,40 - 0,44	0,40 - 0,50
Surface tension	coated side	ASTM D2578	dyne/cm	38 - 42	38 - 42
	plain side			44 - 46	≥ 42

MECHANICAL PROPERTIES		METHOD	UNIT	VALUE	
				<i>Code 440/45</i>	<i>code 440/63</i>
Tensile strength at break	MD	ASTM D882	kg/cm ²	2.200 - 2.400	≥ 2.000
	TD			2.100 - 2.300	≥ 2.100
Elongation at break	MD	ASTM D882	%	90 - 110	≥ 100
	TD			85 - 95	≥ 90

THERMAL PROPERTIES		METHOD	UNIT	VALUE	
				<i>code 440/45</i>	<i>code 440/63</i>
Thermal shrinkage (150°C/30min)	MD	internal	%	2,0 - 2,4 ^(†)	≤ 3
	TD			≤ 0,6 ^(†)	≤ 1

^(†) Valid under the following testing conditions (130°C/30min)

(1) 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

LUSTGARTENSTRASSE, 6 - 79576 WEIL AM RHEIN - DEUTSCHLAND

USt.ID: DE229822516

Tel.: (0049) 76214223880 Fax: (0049) 76214223839

e-mail: info@ultralen.com web: www.ultralen.com

OPTICAL PROPERTIES	METHOD	UNIT	VALUE	
			<i>code 440/45</i>	<i>code 440/63</i>
Haze	ASTM D1003	%	2,5 - 3,5	2,2 - 3,8
Trasparency	ASTM D1003	%	87 - 89	85 - 95

BARRIER PROPERTIES	METHOD	UNIT	VALUE	
			<i>code 440/45</i>	<i>code 440/63</i>
WVTR (37,7°C/90%RH)	ASTM F1249	g/(m ² ·24h)	≤ 40	40 ± 5
O ₂ TR (23°C/0%RH)	ASTM D3985	cm ³ /(m ² ·24h·bar)	≤ 130	130 ± 10

STORAGE

Store the material in a dry location (preferably with RH < 50%) at a constant temperature between 10°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 6 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.

ULTRALEN FILM GmbH

LUSTGARTENSTRASSE, 6 - 79576 WEIL AM RHEIN - DEUTSCHLAND

USt.ID: DE229822516

Tel.: (0049) 76214223880 Fax: (0049) 76214223839
e-mail: info@ultralen.com web: www.ultralen.com