shield

QCM/S

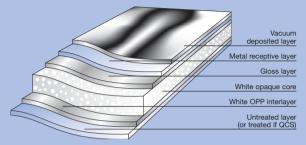
- High barrier metallized opaque film
- Designed for cold seal applications
- Optimised balance of yield and physical properties
- Outstanding presentation opportunities with metal face on interior or exterior of the pack



TREOFAN

PACKAGING FILM QCM/S

White metallized opaque film with high barrier for cold-seal applications with high gloss and enhanced stiffness



Treofan QCM/S is a metallized white opaque film with high barrier designed for cold-seal applications. The film has been specially formulated to produce a higher yield film than standard, to provide an improved balance of yield and physical properties, and an enhanced barrier for both presentation and freshness.

PRODUCT FEATURES

Physical characteristics:

- high resistance to tear and puncture
- excellent resistance to low temperature
- dimensionally stable under conditions of varying humidity
- improved yield vs. standard opaque products

Film characteristics:

- excellent barrier performance
- good metal adhesion
- water repellent
- resistant to oil and grease
- physiologically harmless, thus suitable for food packaging
- resistant to fruit acids and sugars

Optical characteristics:

- metallized exterior (QCM) and high-quality clean white interior
- metallized interior (QCS) and printable white exterior
- good presentation of graphics and good crease resistance for shelf appeal

Special properties:

- printable and glueable
- good antistatic properties
- good machinability
- consistent COF
- balanced yield vs. physical properties
- specially designed for coldseal applications

APPLICATIONS AND PROCESSING

Treofan QCM/S can be used for packaging various types of filling products which need to be protected against moisture, dehydration or packages subject to high mechanical stress, e.g. deepfreeze applications. Using cold-seal coating, it is also suitable for packaging temperature-sensitive products such as chocolate or ice cream.

Printing:

- suitable for both flexographic and rotogravure printing (half-tone and line)
- for Treofan QCM, primers are required to obtain good ink adhesion and protect the metal surface from damage
- for Treofan QCS, a protective lacquer is required for the metallized face to prevent direct contact with the product

Lamination:

 adhesive or extrusion lamination with OPP or with other substrates depending on application

Packaging:

 developed for cold-seal coated applications, the film can be successfully used on a wide range of HFFS machines

Storage:

 place Treofan QCM/S in the processing area approximately 24 hours prior to processing

Certified according to

DIN EN ISO 9001:2000

Compliance with industrial health and safety standards: Treofan OPP films do not present any significant danger to health and safety in the workplace, provided they are used for the intended purpose in accordance with conventional practices and that health and safety regulations are observed. Relevant guidelines can be found in our safety information.

TECHNICAL DATA (typical values)

Properties	QCM/S 35**	QCM/S 40**	QCM/S 50**	Unit	Measuring method
Nominal thickness	35	40	50	μm	
Unit weight	23.5	27.0	34.0	g/m²	ISO 4591
Yield	42.6	37.0	29.4	m²	ISO 4591
Breaking load: machine direction transverse direction	35 80	40 100	45 120	N/15mm N/15mm	DIN ISO 527-1/-3 DIN ISO 527-1/-3
Elongation at break: machine direction transverse direction	120 40	120 40	120 40	% %	DIN ISO 527-1/-3 DIN ISO 527-1/-3
Opacity*	81	82	84	%	DIN 53 146
Whitness (according to Berger)	82	84	86	%	DIN ISO 5033-1/-7
Water vapour barrier: 38°C/90% rh	< 0.4	< 0.4	< 0.4	g/m²*d	ASTM F 1249
Oxygen barrier: 23°C/50% rh	< 50	< 50	< 50	cm³/m²*d*bar	DIN 53 380/3
Optical density	> 2.5	> 2.5	> 2.5		***
Surface tension (non-metallized side)	> 36	> 36	> 36	mN/m	DIN ISO 8296

^{*} Non-metallized film

AVAILABILITY (unprinted film)

Reel length (m):

Packaging film Standard length 6-times QCM/S 35 1,800 10,800 QCM/S 40 1,600 9,600 QCM/S 50 1,300 7,800	s standard
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Maximum reel outside diameter (mm):

Core diameter	Standard length	6-times standard
77 mm	approx. 330	_
152 mm	approx. 360	approx. 740

Tests have shown that under the prescribed storage conditions the characteristics of Treofan QCM/S will maintain consistent performance and will be best before use throughout a 3-months period after delivery. Treofan QCM/S is largely unaffected by climatic influences, but should not be stored at temperatures above 30°C (86°F). The rolls should be kept in their original wrapping until used. After the rolls have been unwrapped, they should be stored safely in horizontal position.

Food Safety

Treofan QCM/S has been developed specially for packaging foods and meets the specific requirements on health and safety. It meets the FDA and EC regulations, which includes the specific "German Food and Commodity Act" and the current recommendations of the BfR. Compliance with other specific national regulations is available on request. It is not recommended that the metallized surface is used in direct contact with food.

The figures and the data provided in this data sheet are consistent with the current state of our knowledge, and are intended to provide general information on our products and their applications. They do not constitute a guarantee of any specific product attributes or the suitability of products for specific applications. Any existing commercial rights or patents must be observed.

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^{**} QCS treated on reverse side

^{***} Internal Method