

DETECTAMET

Technical Data Sheet

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545D Detectable Tote Bin Covers



Technical Data Sheet Applicable To:

545D-1563-P0*	Detectable Tote Bin Covers Roll 250 / 100
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Industry Usage

Detectamet detectable tote bin covers are specifically designed to cover Tote Bin/Eurobin/Dump Buggies to prevent foreign body contamination.

The food grade materials used are compliant to the FDA/EU regulation, for intended use in proximity with food processing, handling and packing operations.

Features and Benefits

- Metal detectable & X-ray visible
- Available in rolls of 100 & 250 sheets
- Available in blue and yellow
- Suitable for 200/300 litre (400lb./600lb.) tote bins/eurobins/dump buggies
- Easily identifiable colours
- Ideal for multi-temperature environments
- Supports safe storage of raw ingredients
- Recyclable cardboard core

Material and Compliance Information

Cover Size:	665mm x 830mm (+/- 5%)
Thickness:	60µm (2.36MILS) (+/- 5%)
Gusset	95mm (3.74") (+/- 5%)
Material Type:	Low-density Polyethylene + Detectable additive
Slip Coefficient Friction:	Medium
Clarity:	Solid colours – Blue, Yellow
Core Size & Material:	715mm x 45mm x 5mm – Cardboard
Printed:	White Detectamet logo printed on outer protective sleeve
Conversion	Perforated on a roll – 100 or 250 covers
Additional Information:	Food use approved

Physical		
Melt Flow Rate, (190 °C/2.16 kg)	1.9 g/10 min	ISO 1133-1
Density	0.924 g/cm ³	ISO 1183-1
Mechanical		
Tensile Modulus	260 MPa	ISO 527-1, -2
Tensile Stress at Yield	11 MPa	ISO 527-1, -2
Film		
Dart Drop Impact Strength, F50	110 g	ASTM D1709
Tensile Strength		
MD	25 MPa	ISO 527-1, -3
TD	21 MPa	ISO 527-1, -3
Tensile Strain at Break		
MD	250 %	ISO 527-1, -3
TD	600 %	ISO 527-1, -3
Coefficient of Friction	<0.2	ISO 8295
Impact		
Failure Energy	4 J/mm	DIN 53373
Thermal		
Vicat Softening Temperature, (A/50)	94 °C	ISO 306
Peak Melting Point	111 °C	ISO 11357-3
Optical		
Haze, (50 µm)	<8 %	ASTM D1003
Typical Properties	Value Units	Test Method
Gloss		
(20°)	>50	ASTM D2457
(60°)	>100	ASTM D2457
Additive		
Slip, Erucamide	500 ppm	LYB Method
Antiblock, Natural Silica	1000 ppm	ISO 3451-1

Additional Information

Test Specimen

Film

Film properties tested using 50 µm thickness blown film extruded at a melt temperature of 180°C and a blow-up ratio of 2.5:1.

Processing Parameters

Extrusion Temperature

160-200 °C

Migration Testing and Compliance Overview

The raw materials to produce this product are food contact safe and in-line with the below regulations.

Detectable Tote Bin Covers Comply with applicable requirements

EU Framework regulation EC1935/2004 and EC1895/2005 on materials and articles intended to come in to contact with food.

Regulation EU2010/2011 updated on Regulation on EU321/2011 and EU1282/2011 on good manufacturing practice for materials and articles intended to come in to contact with food.

Regulation on recycled plastics EC282/2008 and active and intelligent packaging regulation EC450/2009.

Resistance to Tearing

The food grade material used in manufacturing our products is designed to be resistant to tearing when used as specified.

Overall Migration Limit (OML) testing

To determine to OML, migration experiments have been carried out using monolayer film as test specimen (100 µm, S/V ratio 6 dm²/kg) made of LDPE, in food simulants B, C and D2 (according to Table 1 of Annex III of Commission Regulation (EU) no 10/2011) under testing conditions covering long term storage above 6 months at room temperature and below, including heating up to 70°C for up to 2 hours, or heating up to 100°C for up to 15 minutes (OM2 in Table 3, Annex V of Commission Regulation (EU) No 10/2011)

Specific Migration Limit (SML) testing

For substances regulated with a SML and listed in Attachment "Substances subject to restrictions or specifications" SML migration estimates following a worst-case calculation, assuming 100% migration, or migration modelling using an EU-recognized mathematic migration model, or migration experiments during 10 days at 60°C, using monolayer film as test specimen (100 µm, S/V ratio 6 dm²/kg) made of LDPE or a comparable grade in food simulants B, C and D2 (according to Table 1 of Annex III of Commission Regulation (EU) No 10/2011), have been carried out.

Test summary

Results have shown that under mentioned conditions migration limits (overall and if applicable specific) were not exceeded.

Plastic Film

The plastic film with the following legislation,
EU Directive and amendments also regulation EC282/2008 on recycled plastics and EC178/2002 traceability.

Disclosure of Identity of Substances with Restrictions

No restricted substances are in the products.

Dual Use Additives

According to directive 2004/19/EC we do not use additives in plastics subject to restriction in food through an authorisation as food additive or flavouring.

Printing Inks

No transfer to food contact side is possible with tubed material.

Heavy Metals

No heavy metals are used during the formulation or final manufacture of this product.

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