

DETECTAMET

Technical Data Sheet

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154D Silicone Lanyard



Technical Data Sheet Applicable To:

154D-P0*-1183	Metal Detectable Silicone Lanyard (All colours, Pack of 25)
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Industry Usage:

Metal detectable & X-ray visible silicone lanyard. Perfect for hanging items around the neck thanks to the split ring and clip. The intelligent detectable break-away clasp allows the user to reattach their detectable lanyard if it were to break apart.

Features and Benefits:

- Metal detectable & X-ray visible
- Features safety break-away clasp
- Supplied with split ring and clip
- Size: 480mm (18.89") length

Material and Compliance information:

The above is manufactured using pigments which are in accordance with: -

- European Resolution AP (89) 1
- Recommendation IX of the BfR for colouring plastics
- EN71-3 Toy regulation
- EU regulation EU No 2019/1381 amending Regulation EU No 1935/2004
- Is based on a polymer carrier that is compliant with: -
- EU regulation EU No 2020/1245 amending and correcting Regulation (EU) No 10/2011
- EU regulation EU No 2019/1381 amending Regulation EU No 1935/2004

- Has been produced according to Regulation 2023/2006/EC on good manufacturing practice for materials and articles intended to come into contact with food, applicable to plastic raw materials.

This compliance statement is based on information supplied by the polymer and pigment manufacturers, migration testing according to Regulation 10/2011, migration modelling and quality control systems in place at Detectamet.

REACH – No substances of very high concern (SVHC) above the 0.1% weight (w/w) threshold limit are present in the materials.

Regulations and Standards

We confirm that the above-mentioned products are suitable for use in contact with all food types and are in conformity with the applicable requirements of the following regulations and standards:

- Regulation (EC) no.1935/2004 on Materials and Articles intended to come into contact with food.
- Commission Regulation (EU) No.10/2011 on Plastic materials intended to come into contact with food including its updates Regulation 1282/2011 and Regulation 1183/2012.
- Regulation (EC) no. 2023/2006 on Good Manufacturing Practice for materials and articles intended to come into contact with food.
- Council of Europe Resolution AP 89/1 on the use of Colorants in Plastic Materials coming into contact with food.
- US FDA 21 CFR 177.1520 (Olefin polymers) with colorants and additives cleared for use through listing in 178.3297 (Colorants for polymers), 178.2010 (antioxidants and/or stabilisers for polymers, or other respective parts of the FDA regulations).

Migration test data obtained under short-term repeat use test conditions (6dm²/kg food) has demonstrated that levels of overall migration and specific migration of additives from these products will not exceed the legal limits with all food types.

Test Simulants	Food Types	Testing Condition
A-C, D1, D2 of Regulation No. 10/2011 for Plastic Materials and Articles in contact with food	All dry, aqueous, acidic, alcoholic and fatty foods.	2 hours at 70°C, Repeat use. Test OM3 of regulation 10/2011

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Dual-use food additives may be present but any migration into food will be minimal.

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General Information:

Maximum use Temperature: 100 °c

Maximum wash Temperature: 121 °c

Maximum use Temperature: Do not store at deep freeze temperatures prior to use.

Hook and Split Ring

Serial No.	Steel Mark	Size (mm)	Chemical Composition %									
			C	Si	Mn	P	S	Ni	Cr	Mo	Cu	Pb
1	304	2.65*1220	0.078	0.95	1.98	0.039	0.024	8.09	18.12		-	-
Heat No	Weight	Delivery Status	Tensile Strength								Hardness Value	
			Tensile Strength		Yield Strength		Elongation		Yield Extended			
6	12236kg	2B	465								165	

Regulations and standards:

This statement refers to the Products manufactured by Detectamet in stainless Steel (304 grade) for direct contact with food.

AISI Designation	European Standard Designation	
	Name	Number
304 (Austenitic)	X5CrNi18-10	1.4301

We confirm that the above-mentioned products are suitable for use in contact with all food types under and condition of use and are in conformity with the applicable requirements of the following regulations and standards:

- Regulation (EC) no. 1935.2004 on Material and Articles intended to come into contact with food.
- Specific metals release limits of council of Europe (COE) resolution CM/Res (2013) 9 on metals and alloys used in food contact materials.

Manufacture of these products is under quality control procedures meeting the requirements of regulation (EC) no. 2023/2006 on good manufacturing practise for materials and articles intended to come into contact with food.

Silicone Strip

Grade - 60° Shore A

Temperature Range

Minimum (-60°C; -76°F)
 Maximum (230°C; 446°F)
 Intermittent (250°C; 482°F)

General Information

Our metal detectable sheeting range has been tested to and is in compliance with the American Food and Drugs Administration (FDA) 21 CFR 177-2600 & Directive EU 1935/2004.

These Products meet the flammability requirements of FAR 25/JAR 25/CS 25 Appendix F, Part 1, (a)(1)(iv) and (a)(1)(v) horizontal flammability tests and Automotive Standard PART 571MVSS302.

Environmental Resistance

Silicone rubber products have an excellent resistance to:

- Ozone
- Oxidation
- Ultraviolet light
- Corona discharge
- Cosmic radiation
- Ionising radiation
- Weathering in general

Accreditations

- FDA
- FAR 25JAR 25/CS 25 Appendix F, Part 1 (a)(1)(iv) and (a)(1)(v) horizontal flammability test
- Automotive Standard PART 571MVSS302
- EU 1935/2004 compliant
- REACH compliant and RoHS compliant

		Standard	Extra Power	Extra Strength	
Property	Units	Typical Value	Typical Value	Typical Value	Test Method
Hardness Shore A5	Shore A +/- 5	63	63	61	ASTM D2240 DIN ISO 7619-1
Tensile Strength	Mpa (PSI)	8.0 (1160)	8.5 (1235)	7.5 (1090)	SO 37 type 1 ASTM D412 Die C DIN 53504 Type S1
Elongation to Failure	%	370	290	290	ISO 37 type 1 ASTM D412 Die C DIN 53504 type S1
Tear Strength	N/mm (lb./in.)	21 (120)	22 (125)	21 (120)	ASTM D624 Die B
Compression set 24hrs @ 150°C	%	11	14	13	BS 903 pt A6 Type B DIN/ISO 815 Type B
Compression set 22 hrs @ 300°C	%	11	14	13	ASTM D395 Method B Type 2
Magnetic Pull	Mm	7.3	8.3	11.3	SEWI 700

General Characteristics

Test	Result	Standard
Brittle Point	-80°C (-112°F)	ASTM D746
Limiting Oxygen Index	24%	BS 2782 Part 1
Thermal Conductivity	0.24 W.m ⁻¹ .K ⁻¹	VDE 0304
Radiation Resistance	10 ⁵ Grays (10 ⁷ Rads) typical	
Dielectric Strength	23 kV.mm ⁻¹	VDE 0303
Dielectric Constant	2.9	VDE 0303
Dissipation Factor	3 x 10 ⁻⁴	VDE 0303
Volume Resistivity	3x10 ¹⁵ Ωcm	VDE 0303

Migration Testing

Material Reference	Extraction conditions 21 CFR 177.2600	Mean Total Extractives mg/in ²	Limit mg/in ²	Report reference
Metal detectable grade	7 hours reflux in water	0.7	20	W9474/7
	2 hours reflux in water	0.1	1	
	7 hours reflux in n-hexane	21.3	175	W9474RLM002
	2 hours reflux in n-hexane	3.5	4	

Declaration of Compliance

For the above-named food contact material, all individual substances are covered by either:

- A regulation listed in Title 21 Code of Federal Regulations
- Meeting the criteria for GRAS status (including but not limited to a GRAS regulation or GRAS notice) or an effective Food Contact Substance Notification (FCN).
- Compositionally, the above-named food contact material complies with the requirements of the United States of America U.S. Food and Drug Administration Code of Federal Regulations

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