Product Specification Sheet

BST DetectaMark® Permanent Marker | PM-*





Product Description

The body & cap of our Detecta-Mark Markers are moulded from high-density polyethylene, containing a non-toxic metal detectable additive. This compound can be detected by correctly calibrated in-line metal and x-ray detection systems.

The Detecta-Mark Permanent is available in medium and fine tip nibs and feature This alcohol-based ink will permanently mark most surfaces, including wood, plastic, glass concrete and clean or printed metals.

DetectaMark® Permanent Marker Advantages

- ✓ Detectable by in-line metal detection systems & x-ray inspection systems
- ✓ Highly visible bright blue body colour for easy visual identification
- ✓ Permanently marks most surfaces including wood, plastic, glass, concrete and metal
- ✓ Available with standard and fine tip nibs in a variety of ink colours to suit specific requirements
- ✓ Compliant with EU & FDA food contact legislation, including mandatory EU migration test standards
- ✓ Can be used as part of HACCP and BRC procedures
- ✓ Displays due diligence in the prevention of foreign body contamination

Product and Packaging Information

Standard Nib Code	PM-*	Fine Tip Nib Code	PMF-*
Dimensions	134mm x 18mmØ	Dimensions	1120mm x 18mmØ
Ink Colour(s)	B,K,R,G	Ink Colour(s)	B,K,
Write Out Length	900m +/- 20%	Write Out Length	400m +/- 20%
Pack Size	10	Body & Cap Material	HDPE
Pack Weight	0.20kg	End Plug Material	LLDPE
Body Colour(s)	Blue	Detectability	Metal & X-Ray Visible
AntiBacterial	Yes	Country Of Origin	Britain
Nib Material	Polyester	Commodity Code	96082000

Ink Specification

✓ ASTM D-4236 TRA

Safety Certificates / Approvals

FDA Approved	Kosher Certified	Made In Britain
EU Compliant	BRCGS Compliant	ISO 9001:2015

Handling and Storage

Store at normal room temperature, keep away from direct heat and keep in original container.

Ink Properties

This ink does not contain any substances of very high concern (SVHC), Benzene, Toluene or Xylene.

Property	Value
Hazard Identification	With normal use, no known hazards
Stability / Reactivity	Product is stable
Eco Toxicity	Harmful to aquatic organisms and to the aquatic environment in general.
Regulatory Information	R11: Highly Flammable. R22 Harmful if swallowed. R52/53: Harmful to aquatic organisms, may cause long-term effects in the aquatic environment. S25: Avoid contact with eyes. S:26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Ink Safety

Ink contact with skin is not considered hazardous when coming into contact with skin through normal use. In the event of abnormal use causing health problems please refer to the below information.

Route	First Aid
Oral	Give plenty of water to drink if ingestion is suspected
Skin Contact	Wash skin with soap and water
Eye Contact	Irrigate with water for ten minutes - obtain medical attention
Inhalation	Remove from exposure - in severe cases obtain medical attention

Ink Temperature Range

The permanent ink will work in temperature ranges up to 50°C. They will also work in freezing temperatures however, if the cap is left off the nib for longer periods of time at freezing temperatures the nib with solidify due to the sureflow additive that is used to stop the ink from drying out.

Food Contact Status (EU) HDPE Material (Body & Cap)

Hereby we declare that the material HDPE is manufactured in line with the relevant requirements of 2023/2006/EC as amended by Commission Regulation (EC) 282/2008, on good manufacturing practice (GMP) for materials and articles intended to come into contact with food.

The raw materials used in the manufacturing process of the above mentioned materials can be considered suitable for food contact applications in terms of compliance with European regulations. The raw materials used meet the relevant requirements of EU Framework Regulation 1935/2004 on materials and articles intended to come into contact with food.

All monomers, starting substances and additives used to manufacture these grades are listed in Commission Regulation (EU) No.10/2011 as amended by (EU) 321/2011, (EU) 1282/2011, (EU) 1183/2012,
(EU) 202/2014, (EU) 2015/174, (EU) 2016/1416, (EU) 2017/752, (EU) 2018/79, (EU) 2018/213, (EU) 2018/831, (EU) 2019/37, (EU) 2019/1338, and (EU) 2020/1245 respectively, related to Plastic Materials and Articles intended to come into contact with foodstuffs. Colourants used are compliant with European Council Resolution AP(89) 1 on the use of colourants in plastic materials coming into contact with foodfood, and also with German BfR Recommendations (IX).

Food Contact Status (FDA) HDPE Material (Body & Cap)

The polypropylene base resin used in HDPE meets the FDA (Food and Drug Administration) requirements contained in the Code of Federal Regulations in 21 CFR 177.1520. At the same time this base resin grade meets the FDA criteria in 21 CFR 177.1520 for food contact applications, excluding cooking, listed under conditions of use C through H in 21 CFR 176.170 (c), Table 2., and can be used in contact with all food types as listed in 21 CFR 176.170 (c), Table 1. Also the mineral additives and the pigments used are GRAS (Generally Recognized As Safe) or are FDA cleared under specific FDA citations.

Food Contact Status LLDPE Material (Coloured End Plug)

The raw materials used in the manufacturing process of LLDPE are compliant with the Commission Regulation (EU) No. 10/2011 on plastic materials intended to come in to contact with food including its amendments. Under FDA regulations, the listed material is confirmed as generally recognized as safe (GRAS).

Animal Derivatives

To the best of our knowledge there are no ingredients in the formulation of this material that is of animal origin. As such, this material should not pass on any animal derived disease like BSE (Bovine Spongiform Encephalopathy) or other TSE (Transmissible Spongiform Encephalopathy).

Migration Testing

The following overall migration results for HDPE were obtained using a UKAS accredited laboratory, with overall migration simulants and conditions as detailed in EU Regulation No 10/2011 as amended, with regards to use with all food types (no fatty food factor applied).

Sample: HDPE-2016/138
Test conditions: 10 days at 40°C

Method	EN-1186-3 Migration into 10% v/v Ethanol (Simulant A)	EN-1186-3 Migration into 3% w/v Acetic Acid (Simulant B)	EN-1186-2 Migration into Olive Oil (Simulant D2)
Replicate #1	0.4 mg/dm2	0.6 mg/dm2	1.3 mg/dm2
Replicate #2	0.2 mg/dm2	0.4 mg/dm2	0.0 mg/dm2
Replicate #3	0.1 mg/dm2	0.5 mg/dm2	0.0 mg/dm2
Replicate #4			1.9 mg/dm2
Mean Result	0.2 mg/dm2	0.5 mg/dm2	0.8 mg/dm2
EU Limit	10.0 mg/dm2	10.0 mg/dm2	#10.0 mg/dm2

#Limit and tolerance are quoted after the application of a fatty food reduction factor of 2 as quoted in EU Regulation 10/2011

To summarise the overall migration test results, the HDPE complies with the overall migration requirements given in EU Regulation 10/2011, as amended, with regards to use with all non-fatty foods, aqueous foods and fatty foods that require a reduction factor of 2 (or greater), as given in EU regulation 10/2011, as amended.

DetectaMark® Metal Detectability

The body, cap and plug of our markers are manufactured from detectable polymers. These polymers contain evenly dispersed non-toxic detectable additives, making the material detectable by correctly calibrated metal detection systems and x-ray inspection systems. Metal detectability performance will vary based on, but not limited to the following factors:

- Calibration Levels
- Product Type (E.g. Wet, Dry, Frozen, Liquid)
- Aperture Dimensions
- Orientation

Orientation is a highly influential factor for the metal detectability of a contaminant that is non spherical, i.e. it will be easier to detect the contaminant when passing in one orientation compared to another - this is known as the orientation effect.

For this reason BST recommend that all our products be thoroughly tested on your metal detection systems by a trained and certified professional. It may be the case that your equipment needs to be re-calibrated in order to reliably detect this product. Such a professional should be available by contacting the manufacturer of your metal detection system.

DetectaMark® X-Ray Visibility

In contrast to metal detection, x-ray visibility is determined by material density. For this reason, our markers contain an additional, evenly dispersed, food safe, high density additive. X-ray detection performance will be reduced when small fragments are buried in deeper, denser products - detection will depend on product type and density.

We highly recommend that all our products be thoroughly tested on your x-ray inspection systems by a trained and certified professional. It may be the case that your equipment needs to be recalibrated in order to reliably detect this product. Such a professional should be available by contacting the manufacturer of your x-ray inspection system.

The information provided in this product specification sheet is based on our experience and knowledge to date and we believe it to be true and reliable. This information is intended as a guide for your use of our products, the use of which is entirely at your own discretion and risk. We, BS Teasdale & Son Ltd, cannot guarantee favourable results and assume no liability in connection with the use of our products. © 2026 BS Teasdale & Son Ltd. All Content, Data & Images are owned by BS Teasdale & Son Ltd and are protected by international copyright law.

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