# BST DETECTA-MARK MEAT MARKER

DUAL DETECTABLE MEAT & CHEESE MARKER

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# **Product Specifications**

ST1M1000MBM | Revised February 2019





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Ink Properties:	Property	Value
	Hazard Identification:	Not regarded as a health or environmental hazard under current legislation
	Eco Toxicity:	Not regarded as dangerous for the environment
	Appearance:	Coloured Liquid
	Colour:	Varying / Brown when used for marking
	Odour:	No characteristic odour
	Solubility:	Soluble in water
	Ink Boiling Point:	95° C
	Ink Freezing Point:	3º C
	Flash Point:	N/A

### Food Contact Status (EU) HDPE Material

Hereby we declare that the material HDPE is manufactured in line with the relevant requirements of 2023/2006/EC 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) on plastic materials and articles intended to come into contact with food.

Colourants used are compliant with European Council Resolution AP(89) 1 on the use of colourants in plastic materials coming into contact with food.

#### Food Contact Status (FDA) HDPE Material

The polypropylene base resin used in HDPE meets the FDA (Food and Drug Administration) requirements contained in the Code of Federal Regulations – latest revision (1/4-2011) - in 21 CFR 177.1520 (a) (3) (i) , (b) and (c) (3.1a).

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

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).



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### **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/dm <sup>2</sup>	0.6 mg/dm <sup>2</sup>	1.3 mg/dm <sup>2</sup>
Replicate #2	0.2 mg/dm <sup>2</sup>	0.4 mg/dm <sup>2</sup>	0.0 mg/dm <sup>2</sup>
Replicate #3	0.1 mg/dm <sup>2</sup>	0.5 mg/dm <sup>2</sup>	0.0 mg/dm <sup>2</sup>
Replicate #4			1.9 mg/dm <sup>2</sup>
Mean Result	0.2 mg/dm <sup>2</sup>	0.5 mg/dm <sup>2</sup>	0.8 mg/dm <sup>2</sup>
EU Limit	10.0 mg/dm <sup>2</sup>	10.0 mg/dm <sup>2</sup>	#10.0 mg/dm <sup>2</sup>

## #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.



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### 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:

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

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 recalibrated in order to reliably detect this product and its fragments. Such a professional should be available by contacting the manufacturer of your metal detection system.

#### DISCLAIMER

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. © 2019 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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