

BST Trace-It® Detectable Pen | TRACE2PEN*



The BST Trace-It® Detectable Pen

These Trace-It® pens are an economical alternative to our premium pens which feature a metal detectable and x-ray visible plastic body and insert which is made from our specially formulated xdetect® Polypropylene compound. With a blue body for visual identification and black and blue ink options, as well as clipped and looped models available, these pens are designed to be the perfect addition to your food production areas. They are compliant with EU and FDA food contact legislation and the ink conforms with ISO 12757-2 for documentary use.

The BST Trace-It® Detectable Pen Advantages

- ✓ Detectable by in-line metal detection systems and x-ray inspection systems
- ✓ Highly Visible blue colour for easy visual identification
- ✓ The ink conforms with ISO 12757-2
- ✓ Strong, durable, shatter resistant, and chemically resistant
- ✓ Compliant with EU and FDA, including mandatory EU migration test standards
- ✓ Can be used as part of HACCP and BRC procedures
- ✓ Write out length of 9,000m +/- 30%
- ✓ Clipped and looped versions are available and bespoke printing can be added if requested
- ✓ Displays due diligence in the prevention of foreign body contamination

Product and Packaging Information

With Pocket Clip	TRACE2PENB*	Ink Colour(s)	B,K
With Loop	TRACE2PENLB*	Housing Material	Polypropylene
Pack Size	50	Cartridge Material	Stainless Steel
Pack Weight	0.55kg	Write Out Length	9,000m +/- 30%
Body Colour(s)	Blue	Commodity Code	96081010

Ink Specification

- ✓ Temperature Range 5 ~ 30°C
- ✓ Unpressurised ink
- ✓ ISO 12575 - 2 DOC G2
- ✓ ISO 12575 - 2 DOC H
- ✓ ISO 12575 - 2 G2
- ✓ ISO 12575 - 2 DOC A2
- ✓ ISO 12575 - 1 A M
- ✓ TSCA Listed (USA)
- ✓ ISO 12757 - 1
- ✓ ISO 12757 - 2
- ✓ Conforms to REACH standards

Safety Certificates / Approvals

FDA Approved	BRC Compliant	Made In Britain
EU Compliant	ISO 9001:2015	



Food Contact Status (EU)

Hereby we declare that the material XDETECT® in various colours 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 (XDETECT® in various colours) 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. Applicable restrictions on monomers, additives etc.

(SML, QM) are available on request. The finished articles are required to meet the Overall Migration Limit (OML) of 10 mg/dm(sq) or 60 mg/kg 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.

XDETECT® (various colours) is compliant with Directive 1895/2005/EC on the restriction of use of certain epoxy derivatives (BADGE, BFDGE, NOGE), since the latter substances are not intentionally used in the manufacturing process of XDETECT®.

BST Detectable Products hereby declare that articles manufactured from BST XDETECT® are, according to EU regulations, authorised to come into direct contact with all types of foodstuffs at a maximum temperature of 40°C for a maximum time period of one hour.

Food Contact Status (FDA)

The polypropylene base resin used in XDETECT® 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.

ISO Standards

This ink conforms with ISO 12757-2. For documentary use, to assure the legibility of lettering and for the handling and storage of documents during long periods of time. Testing of light resistance to a minimum of 5 years.

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 XDETECT® were obtained using a UKAS accredited laboratory, with overall migration simulants and conditions as detailed in EU Regulation No 10/2011 as amended, on plastic materials and articles intended to come into contact with food.

Sample: PP-C-2013/393

Test conditions: Simulants A, B and 95%v/v ethanol: 10 days at 40°C. Iso-octane: 2 days at 20°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-1186-14§ Migration into Iso-octane (Substitute test)	EN-1186-14§ Migration into 95% Ethanol (Substitute test)
Replicate #1	0.2 mg/dm ²	0.5 mg/dm ²	19.4 mg/dm ²	0.8 mg/dm ²
Replicate #2	0.3 mg/dm ²	0.5 mg/dm ²	21.0 mg/dm ²	0.9 mg/dm ²
Replicate #3	0.0 mg/dm ²	0.3 mg/dm ²	20.8 mg/dm ²	0.6 mg/dm ²
Mean Result	0.2 mg/dm ²	0.4 mg/dm ²	20.4 mg/dm ²	0.8 mg/dm ²
EU Limit	10.0 mg/dm ²	10.0 mg/dm ²	#20.0 mg/dm ²	10.0 mg/dm ²
Tolerance			#6.0 mg/dm ²	

#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 PP-C-2013/393 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.

DetectaPen® Metal Detectability

BST DetectaPens® are made using XDETECT®, an electromagnetically detectable and x-ray visible plastic compound. Within the pen housing is a stainless steel ink cartridge. The metal detectability of this product will vary based on, but not limited to:

- 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.

DetectaPen® X-Ray Visibility

In contrast to metal detection, x-ray visibility is determined by material density. For this reason, XDETECT® contains an additional, evenly dispersed, food safe, high density additive.

Based on our experience and testing, positive readings should be consistent both for whole pens and XDETECT® fragments as small as 5mm. 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. © 2020 BS Teasdale & Son Ltd. All Content, Data & Images are owned by BS Teasdale & Son Ltd and are protected by international copyright law. SteriTouch® is a registered trademark of Radical Materials Ltd

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