

## Product Specifications

| January 2020



### The Flexible Palm Scrapers

The stainless steel flexible palm scrapers feature TPE detectable handles and 304 grade stainless steel blades.

TPE is a polyurethane based thermoplastic polymer compound, that is electromagnetically detectable. The native properties of this polyurethane mean that the compound is strong, flexible and offers good resistance to many chemical solvents, acids and bases, when compared to other plastics.

The food safe stainless steel blade will not rust and can also be detected by metal detection systems. This scraper is suitable for a variety of food contact applications, particularly in the baking industry.

- Product Advantages:**
- ✓ Can be detected by in-line metal detection systems
  - ✓ Can be used to form part of HACCP and BRC procedures
  - ✓ Shows "All Due Diligence" in the prevention of foreign body contamination
  - ✓ Can be used in a variety of food contact applications

**Product Code:** 8900236-

**Product Colour:** Blue, Red, Green

**Product Dimensions:** 120mm x 100mm

**Pack Size:** Pack of 10

## PRODUKTINFORMATIONEN

### Food Contact Status (EU)

Hereby we declare that the material TPE 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 (TPE) 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 and also with German BfR Recommendations (IX).

The Detectable Products hereby declare that articles manufactured from 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 styrene block copolymer (SEBS) used complies with the FDA, Title 21CFR 177.1810 (3).

The polypropylene (PP) base resin used meets the FDA (Food and Drug Administration) requirements contained in the Code of Federal Regulations in 21 CFR 177.1520 (a) (1) (i) , (b) Olefin Polymers.

The paraffinic white oil-based plasticizer used complies with FDA, Title 21CFR 172.878, Title 21CFR 178.3620 (a) and Title 21CFR 178.3740.

Also the mineral additives and the pigments used are GRAS (Generally Recognized As Safe) or are FDA cleared under specific FDA citations.

### Metal Detectability (FOR GUIDANCE ONLY)

TPE is an electromagnetically detectable and x-ray visible plastic compound. The metal detectability of this compound will vary based on, but not limited to the following factors:

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

For this reason Niebling 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. Such a professional should be available by contacting the manufacturer of your metal detection system. XDETECT samples gave following test piece equivalent readings when tested through the geometric centre of an Anritsu KD8124AW coaxial metal detection system with a 95 x 450 mm aperture:

## PRODUKTINFORMATIONEN

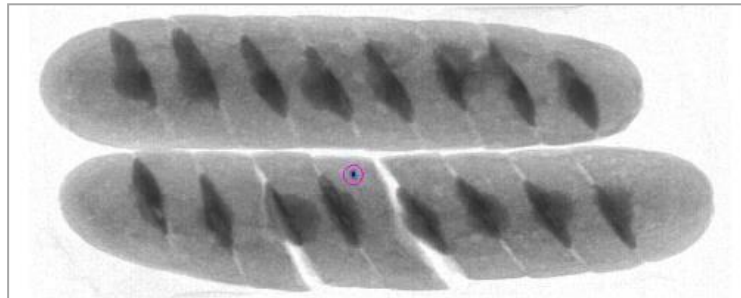
XDETECT Contaminant Size	Advised Minimum Ferrous Sensitivity for Detection
4.0 mm <sup>3</sup> Cube	2.0 mm FE
6.0 mm <sup>3</sup> Cube	2.5 mm FE
7.0 mm Ø Sphere	2.5 mm FE
8.0 mm <sup>3</sup> Cube	3.5 mm FE
11.0 mm Ø Sphere	4.0 mm FE

Although designed to be detected as a ferrous contaminant, XDETECT will also trigger smaller readings as a non-ferrous and stainless steel contaminant. Please note that the above information is for guidance only, and performance will vary.

### X-Ray Visibility (FOR GUIDANCE ONLY)

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 for XDETECT fragments as small as 5mm<sup>3</sup>. X-ray detection performance will be reduced when small fragments are buried in deeper, denser products. **Detection will depend on product type and density.** This screenshot shows a 5mm<sup>3</sup> XDETECT fragment through a popular x-ray inspection system, inside a packaged garlic bread product.



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.

### 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, Niebling Technische Bürsten GmbH, cannot guarantee favourable results and assume no liability in connection with the use of our products.