

Product Specifications

| March 2020



The XDETECT® Catering Knife Range

Our range of professional quality catering knives are manufactured in Sheffield, England, a city with a rich steel and knife making heritage. Our knife blades are made from fully hardened, tempered 420 stainless steel and are easy to clean.

Our handles are insert moulded from XDETECT, which will withstand dishwasher use and has the advantages of being detectable by metal detection and x-ray inspection systems. These blue handled detectable catering knives are kept in stock.

By combining the latest detectable technology with specialist knife making expertise, we have created a very special series of professional knives that meet the needs of food processors across the globe.





The products detailed in this specification sheet represent our standard range of detectable knives. If you have a specific requirement then we will most likely be able to cater for your needs. We can supply a variety of bespoke knives to suit our customer needs, such as double handled knives and knives with a variety of finishes such as serrated or wavy (scalloped) edged blades.

Product Advantages:




- ✓ Fully detectable by in-line metal detection systems
- ✓ Fully detectable by in-line x-ray inspection systems
- ✓ Strong, durable & shatter resistant handles
- ✓ Compliant with EU & FDA food contact legislation
- ✓ Hardened and tempered stainless steel blades
- ✓ Displays due diligence in the prevention of foreign body contamination
- ✓ Can be used as part of HACCP and BRC procedures
- ✓ This range of blue handled knives are kept in stock

PRODUKTINFORMATIONEN

Please note all of these blue handled knives are held in stock and have a standard 2-3 working day delivery time.

Knife Description	Blade Size	Blade Style	Edge Style	Product Code
Scoring Knife 	2.5" Blade	Standard Blade	Plain Edge	8900522-B
Mini Parer Knife 	3" Blade	Standard Blade	Plain Edge	8900542-B
Eye Dough Knife 	8" Blade	Standard Blade	Plain Edge	8900543-B
Plain Vegetable Knife 	4" Blade	Standard Blade	Plain Edge	8900544-B

PRODUKTINFORMATIONEN

<p>Scalloped Vegetable Knife</p> 	<p>4" Blade</p>	<p>Standard Blade</p>	<p>Scalloped Edge</p>	<p>8900545-B</p>
<p>Eye Serrated Vegetable Knife</p> 	<p>4" Blade</p>	<p>Standard Blade</p>	<p>Serrated Edge</p>	<p>8900546-B</p>
<p>Boning Knife</p> 	<p>6" Blade</p>	<p>Standard Blade</p>	<p>Plain Edge</p>	<p>8900547-B</p>

Food Contact Status (EU)

Hereby we declare that the material XDETECT 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) 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.

PRODUKTINFORMATIONEN

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 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.

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 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.

Metal Detectability (FOR GUIDANCE ONLY)

The XDETECT 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:

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

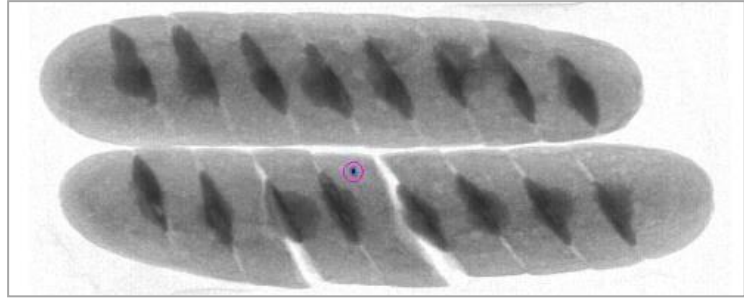
Although designed to be detected as a ferrous contaminant, XDETECT will also trigger smaller readings as a non-ferrous and stainless steel contaminant. Please note that the above information is for guidance only, and performance will vary.

PRODUKTINFORMATIONEN

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 5mm³. 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 5mm³ 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.

ISO Standards

The Detectable Products are certified in accordance with ISO 9001-2015

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.