BST Detectable Nitrile Gloves | NGLOVE*





Light, durable, and with superior resistance to chemicals, these comfortable nitrile gloves are ideal for users with latex allergies. They are ambidextrous, available in three sizes, and feature textured fingers to help with grip. These gloves are latex free, powder free, food contact approved, and metal detectable by in-line detection systems. Fragments as small

as 5mm³ can be identified by correctly calibrated inspection systems, although detection performance will vary based on the food being inspected, the equipment type and other parameters. This single use disposable PPE item also complies with international quality standards, bringing you assurance and peace of mind.

Detectable Gloves Advantages

- ✓ Detectable by in-line metal detection systems
- ✓ Highly visible blue colour for easy visual identification
- ✓ Food contact safe Do not leach harmful phthalates
- ✓ Suitable for all food handling including acidic foods
- ✓ Allergy and powder free made from Nitrile deeming them suitable for uses with latex allergies
- ✓ FDA approved and EU compliant
- ✓ 3 year shelf life
- ✓ Conforms to Japanese Food Sanitation Law
- ✓ Displays due diligence in the prevention of foreign body contamination

Product and Packaging Information

Product Code	NGLOVEM	Size	Medium
Product Code	NGLOVEL	Size	Large
Product Code	NGLOVEXL	Size	Extra Large
Pack Size	100 (50 pairs)	Finishing	Textured Fingers
Pack Weight	0.65kg	Material	Nitrile
Thickness	5 mil / 0.127mm	Detectability	Metal Detectable
Colour	Blue (black inside)	Country Of Origin	Malaysia
Latex Free	Yes	Commodity Code	40151900

Safety Certificates / Approvals

FDA Approved	ASTM Certified	CE PPE Cat III marked	UKCA marked
EU Compliant	BRCGS Compliant	ISO 9001:2015	
	BRGS In Partnership (

Standards & Compliances

FDA 21 CFR Part 177.2600 - Substances for Use as Basic Components of Single and Repeated Use Food Contact Surfaces

EU Regulation No.10/2011 and 2020/1245 - Respectively, related to Plastic Materials and Articles intended to come into contact with foodstuffs.

ASTM D7329-07 - Standards Specification for Food Preparation and Food Handling (Food Service) Gloves

SI 2012 No. 2619 - The Material and Articles in Contact with Food (England) Regulation 2012

Japanese Food Sanitation Law - Specifications and Standards for Food and Food Additives, etc

Regulation (EC) No 1935/2004 - Materials and Articles intended to come into contact with food

EN 1186 - Materials and Articles in Contact with Foodstuffs

EN 374-1 - Protective Gloves against Dangerous Chemicals and Micro-organisms -Type B

EN 375-5 - Protective Gloves against Viruses, Bacteria and Fungi

ISO 10993 - Biocompatibility test for irritation, skin sensitization and systemic toxicity

EU Migration Testing Results

Method: With reference to EN 1186-1:2002 for selection of conditions and test methods; EN 1186-9:2002 aqueous food simulants by article filling method (1st Migration); EN 1186-14:2002 substitute test.

Simulant Used	Test Condition	Result (mg/dm²)	Reporting Limit (mg/dm²)	Permissible Limit (mg/dm²)
3% Acetic Acid (W/V) Aqueous Solution	2 hours at 40°C	ND	3.0	10
10% Ethanol (V/V) Aqueous Solution	2 hours at 40°C	ND	3.0	10
50% Ethanol (V/V) Aqueous Solution	2 hours at 40°C	ND	3.0	10
Fatty food substitute				
95% Ethanol (V/V) Aqueous Solution	2 hours at 40°C	ND	3.0	10
Comment	-	PASS	-	-

1. mg/dm2 = milligram per square decimeter

2. °C = degree Celsius

3. ND = Not Detected

4. Permissible Limit is according to Council of European Resolution AP (2004) 4.

Remark:

1. Analytical tolerance of aqueous simulants is 2mg/dm2 or 12mg/kg

2. Analytical tolerance of fatty food simulants is 3mg/dm2 or 20mg/kg

3. Test condition & simulant were specified by client.

FDA Testing Results

This glove meets FDA 21 CFR 177.2600 (e) & (f) requirements. The sample was extracted with the food simulants and extracted at the reflux temperature for 7 hours and then for another further succeeding 2 hours. The extract was then evaporated to dryness and the total extractives were then measured using an analytical balance.

Simulant Used	Surface Area (in ²)	Volume of Extractant (ml)	Total Extractives (mg/in ²)	FDA 21 CRF 177.2600 (e) & (f), Total Extractives Requirements (mg/in ²)	Inferred Result
Ultrapure water at reflux temperature for 7 hours	151.40	250	0.7	<20	Pass
Ultrapure water at reflux temperature for succeeding 2 hours	151.40	250	0.2	<1	Pass
n-Hexane at reflux temperature for 7 hours	157.58	250	0.2	<175	Pass
n-Hexane at reflux temperature for succeeding 2 hours	157.58	250	<0.1	<4	Pass

Metal Detectability Testing & Results

These gloves can be detected by correctly calibrated metal detection systems. The detectability of this product will vary based upon the metal detection systems being used and their calibration. 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. During testing



Image 01

of the BST DetectaPen® we used a worst case scenario which is through the geometric centre of the aperture and in the worst case orientation. We used a piece of form and set it up in the machine as the main product (H), in order to pass the contaminant on top. The product (H) has been set up in the IQ4H 100mm aperture height metal detector (image 01 indicates the version of the software used) at 25 m/min belt speed. Please note, the following results are applicable only to the product (H) or similar and that detection performances vary with the main product and packaging type.

Machine Settings:

Belt Speed	Head Gain Settings	Frequency	Threshold	Phase Angle
25 m/min	I Gain = Low Q Gain = Max RF Gain = Med Head Drive - Max	625kHz	100	121.7



(Length 190mm Width 115mm Height 15mm)



(Product E)

Please refer to the below table for results of the full product sample and the smallest peice detected an signals:

Complete Product	Reject Signals	Samllest Piece Detected	Reject Signals
Nitrile Gloves (Product E)	I / Q Saturated (Very Good Reject Signals)	15mm in length and 10mm in width	550-650

Product passes through the centre of the aperture:

Metal Detectability Testing & Results

All of the above results are based on our own testing, and is supplied purely for customer convenience. Different detector systems will feature different sensitivity settings, as well as settings for different product types (E.g. Wet, Dry, Frozen, Liquid).

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.

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. © 2023 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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