



Neoprene Rubber Sheeting | NR*



Neoprene Material

BST detectable neoprene rubber sheeting is designed to be detected as a contaminant during the food manufacturing process, addressing the concerns of rubber sealing particles from machinery contaminating production lines. The rubber contains an evenly dispersed food grade metal detectable additive

designed to trigger metal detection systems widely used in food production.

This food contact approved material has a service temperature range of -25°C ~ 120°C and is resistant to hot oil, water, alcohol caustic and acid.

Neoprene Material Advantages

- ✓ Detectable by in-line metal detection systems
- ✓ Highly visible blue colour for easy visual identification
- ✓ Compliant with FDA and EU food contact legislation
- ✓ Free from phthalates
- ✓ Wide operating temperature range
- ✓ Excellent overall weathering resistance
- ✓ Can be used as part of HACCP and BRC procedures
- ✓ Displays due diligence in the prevention of foreign body contamination

Neoprene Product and Packaging Information

NR151	Thickness	1.5mm	Dimensions	1.0 x 1.0m	Weight	3.0kg/m
NR301	Thickness	3.0mm	Dimensions	1.0 x 1.0m	Weight	6.0kg/m
NR501	Thickness	5.0mm	Dimensions	1.0 x 1.0m	Weight	8.0kg/m

Pack Size	1.2 x 1.0m	Grade	65 Shore A
Colour	Blue	Detectability	Metal Detectable
Temperature Range	-25°C ~ 120°C	Country Of Origin	Britain
AntiBacterial	No	Commodity Code	40082190

Safety Certificates / Approvals

FDA Approved	BRCGS Compliant	Made In Britain	ISO 9001:2015
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Material

Manufactured from food safe neoprene rubber compound, with a non-hazardous evenly dispersed metal detectable additive.

Typical Applications

Seals, Joints, Gaskets, Strips, Fingers and Curtains used in hygiene sensitive food, drink and pharmaceutical processing applications.

Tolerances

The detectable neoprene rubber sheeting will be compliant with the following dimensional tolerances:

1.5mm sheet thickness:	+/- 0.30 mm
3.0mm sheet thickness:	+/- 0.40 mm
5.0mm sheet thickness:	+/- 0.55 mm
1000mm sheet width:	+/- 3%
65 Shore A sheet hardness:	+/- 5.0°

Food Contact Status (FDA)

The ingredients of this material formulation are acceptable to FDA listings and meet the FDA Section 21 CFR 177.2600 covering “rubber articles intended for repeated use”.

Food Contact Status (EU)

This material also conforms to certain EU Regulations that allow them to comply with the applicable requirements of Article 3, and Articles 15 and 17 of the Regulation (EC) 1935/2004.

Mechanical Properties

Property	Value	Test Method
Specific Gravity	1.50 g/cm3	ASTM D297
Tensile Strength	140 Kg / cm2	ASTM D412
Hardness	65° Sh A	ASTM D2240
Elongation at break	600%	ASTM D412
Tear Resistance (Angular)	30 Kg / cm	ASTM D624
Compression Set (70°C / 24 hours / 25% compression)	50%	ASTM D395
Lower Working Temperature	-25°C	
Upper Working Temperature	120°C	

Metal Detectability

Metal detectable neoprene sheeting contains an evenly dispersed food safe ferromagnetic additive, designed to offer good levels of metal detection whilst not compromising the performance properties of the material. 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.

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.