Product Specification Sheet



Metal Detectable Mouse Mat | BSTMM



BST Silicone Mouse Mat

The BST Detectable Mouse Mat is made from our 3mm Silicone Rubber Sheeting. Metal detectable silicone is suitable for temperatures ranging from -60°C to 230°C.

Subject to correct calibration and testing of metal detection systems, a 5mm section of our detectable silicone should be sufficient to trigger a detection and rejection process. This detectable silicone is highly resistant to degradation from chemical and environmental factors, and is suitable for use in a

range of demanding environments. It is also resistant to ozone, oxidation, UV light, corona discharges, cosmic radiation, ionising radiation and general weathering

Our metal detectable silicone is tested to and complies with the requirements of the US Food and Drug Administration (FDA) regulation 21CFR177.2600 for rubber articles in repeated contact with food, and EC 1935/2004 & 2023/2006 on materials and articles intended to come into contact with food.

BST Mouse Mat Advantages

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

Product and Packaging Information

Product Code	BSTMM	Material	60 Shore A Silicone
Pack Size	1	Detectability	Metal Detectable
Pack Weight	0.01kg	Antibacterial	No
Colour(s)	Blue	Country Of Origin	Britain
Dimensions	250 x 200 x 3mm	Commodity Code	39235090

Safety Certificates / Approvals

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







Material Properties

Manufactured from '60 Shore A' food safe silicone rubber, with a non-hazardous metal detectable additive. Phthalates are not present in these products. This silicone sheeting has excellent resistance to ozone, oxidation, ultraviolet light, corona discharge, cosmic radiation, ionizing radiation and weathering in general. The product lifespan may be reduced by constant exposure to damp / salty environments.

Property	Units	Value
Hardness (+/-5)	Shore A	60
Tensile Strength	MPa (PSI)	8.0
Elongation to failure	%	370
Tear Strength	N/mm2	21
Compression Set 24hrs @ 150°C	%	11
Compression Set 22hrs @ 300°C	%	11
Magnetic Pull	mm	7.3
Temperature Range	°C	-60°C ~ 230°C

Food Contact Status (EU)

Hereby we declare that the material grade 60 shore A Silicone 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.

In addition it is are also compliant with EU regulation EC 1935/2004.

Food Contact Status (FDA)

We hereby confirm that these mats are manufactured from grade 60 shore A silicone contain only listed ingredients according to FDA standard CFR 177.2600 and are fully post cured in accordance with the raw material manufacturers guidelines.

The silicone polymer, pigments and curative used in the manufacture of these mats are all suitable for food applications, and will meet the FDA Section 21 CFR 177.2600 covering "rubber articles intended for repeated use" and/or comply with recommendation of the BfR (former BgVV) XV "Silicones".

Metal Detectability

The silicone mouse mats contain an evenly dispersed metal detectable additive, designed to offer good levels of metal detection whilst not compromising the performance properties of the material. An 8 x 8 x 5 mm piece of metal detectable silicone gave the following test piece equivalent readings when tested through the geometric centre of a metal detection system with a 95 x 450 mm aperture.

Reading Type	Test Piece Equivalent	Recommended Detector Sensitivity
Ferrous	4.0mm	3.5mm
Non Ferrous	3.0mm	2.5mm
Stainless Steel	3.5mm	3.0mm

The above tests were repeated three times in order to gain accurate readings, please bear in mind however that the above guidance does not take into account all product(s) type. 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.