

Technical Data Sheet

815/817 – Metal Detectable Silicone Sheeting
And Silicone Rubber Strip



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This Technical Data Sheet is applicable to the

815-*	Metal Detectable Silicone Sheeting (Blue, All sizes)
817-*	Metal Detectable Silicone Rubber Strip (Blue, All sizes)

Industry Use

These metal detectable and X-ray visible food grade silicone strips are manufactured from FDA approved food safe material. Perfect for demanding application within food factories, having excellent heat and flame resistance and good aging and weathering characteristics.

Features and Benefits

- Metal detectable & X-ray visible food grade silicone
- Easily converted into Gaskets, electrical seals, washers etc.
- Temperature range: -60 to 200°C (-76 to 392°F)
- FDA compliant to 21 CFR 177.2600
- Shore hardness: +/- 5°C to 60°C (41 to 140°F)
- Colour: Blue

Material Composition and Characteristics

Test	Result	Standard
Brittle Point	-80°C (-112°F)	ASTM D746
Limiting Oxygen Index	24%	BS 2782 Part 1
Thermal Conductivity	0.24 W.m ⁻¹ k ⁻¹	VDE 0304
Radiation Resistance	>10 ⁵ Grays (10 ⁷ Rads) typical	
Dielectric Strength	23 kV.mm ⁻¹	VDE 0303
Dielectric Constant	2.9	VDE 0303
Dissipation Factor	3x10 ⁻⁴	VDE 0303
Volume Resistivity	3x10 ¹⁵ Ω.com	VDE 0303

Mechanical Properties

Property	Units	Spec Limits	Typical Value	Test Method
Hardness	Shore A	70 +/- 5	68.7	ASTM D2240 DIN ISO 7619-1
Tensile Strength	MPa psi	8.0 min 1160 min	8.42 1221	ISO 37 type 1 ASTM D412 die C DIN 53504 type S1
Elongation to failure	%	300 min	327	ISO 37 type 1 ASTM D412 die C DIN 53504 type S1
Tear strength	N/mm Lb/in	12 min 68.5 min	19.1 109	ASTM D624 die B
Compression Set 24 hours @ 150°C	%	35 max	11.2	BS 903 pt A6 type B DIN/ISO 815 type B
Compression Set 22 hours @ 300°F	%	35 max	11.0	ASTM D395 method B type 2
Magnetic Pull	Mm	-	7.3	SEWI 700

Compliance Information

This product is fully compliant with the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS) regulation contained in Article 4(1) of the European Parliament and Council's Directive 2002/95/EC

None of the following substances are contained in; or used in the production process of any of the elastomer products (either solid or cellular):

Lead (Pb), cadmium (Cd), hexavalent chromium (Cr6+), mercury (Hg), phthalates, Bisphenol A, polycyclic aromatic hydrocarbons (PAH), Short chain chlorinated parafins (SCCP), polybrominatedbiphenyl ether and polybrominated diphenyl ether flame retardants (this includes octabromobiphenyl ether).

These products are associated production processes are free of any animal derivatives and are latex free.

None of the cellular silicone elastomer products contain azodicarbonamide blowing agents.

None of these products manufactured contain Perfluorooctane Sulfonates (PFOS)
TYM's rubber products are also fully compliant with the Registration, Evaluation and
Authorisation of Chemicals (REACH) regulation (European Union 1907/2006). Our products
do not contain any of the chemicals identified as Substances of Very High Concern (SVHC)
by the European Chemicals Agency (ECHA), which oversees REACH compliance.

All silicone elastomer products produced and their processing methods comply with the
substance control requirements of the following directives.

GADSL (formally known as ILRS List 101 and VDA list 232-101)

EC Directive 76/769/EC

EC Directive 2011/65/EU (RoHS)

EC Directive 2002/96/EC (WEEE)

EC Directive 2002/95/EC

EC Directive 2000/53/EC (ELV)

EC Directive 2003/11/EC

EC Directive 2006/122/EC

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