

TECHNICAL DATA SHEET

Low Combustion Hazard Solid Silicone Rubber – Mouldings & Extrusions

Grades: 72 LCH1

Temperature Range: -60°C to 230°C

AVAILABILITY

72 LCH1 is available in the form of sheeting, mouldings, profile extrusions and can also be used to manufacture insulation for cables. It is particularly suited to use in engineering applications where public safety is a main concern. There is a wide range of standard colours available; although not all colours can be matched Silicone Engineering has a large amount of experience at being able to produce these materials in colours that are tailored to customer requirements.

SPECIFICATIONS

72 LCH1 satisfies the BS 6853 **Category 1** requirements and meets the requirements of the LUL Code of Practice for Fire Safety (Materials used in the Underground; August 1990.)

72LCH1 has been tested to NF F 16-101 by Laboratoire De Trappes, and has been accredited with **I2** and **F0** classification.

FLAMMABILITY CHARACTERISTICS OF UNPIGMENTED MATERIAL

Property	BS 6853 Category 1a	72 LCH1
Temperature Index	>300°C	341°C
Flame Length	<50 mm	<50 mm
Limiting Oxygen Index	>34%	34.7
A ₀ Smoke Index	<0.017	0.0162
NFF Test	NFF Test Method	72 LCH1
Smoke index	NFX 10.702	10.4
Conventional Index of toxicity	NFX 70.100	6.28
Class	-	F1
Glow wire Test	NFC 20.455	Classified I2*

*Class I2 = Oxygen limit of more than or equal to 32% and no ignition at 850°C glow wire

Environmental Resistance – Silicone rubber products have an excellent resistance to ozone, oxidation, ultraviolet light, corona discharge, cosmic radiation, ionising radiation and weathering in general.

Other grades of silicone rubber available from Silicone Engineering are:

- * General Purpose Grades
- * Cellular silicone Products
- * High Temperature Grades
- * High Tear Grades
- * Flame Retardant Grades
- * Low Combustion Hazard Grades
- * Custom Compounds

This wide range of grades and production capability in silicone rubber is only available from



Greenbank Business Park, Blakewater Road, Blackburn, Lancashire, BB1 3HU England
Telephone: +44(0)1254 261321 Facsimile: +44(0)1254 583519 Web: www.silicone.co.uk

This information and our technical advice, whether verbal, in writing or by way of trials, is given in good faith but without warranty. This also applies where proprietary rights are involved. Our advice does not release you from the obligations to check its validity and to test our products as to their suitability for the intended use. The storage, application and use of our products are beyond our control and, therefore, entirely your own responsibility. Our products are sold in accordance with our General Conditions of Sale. The information contained within this data sheet is subject to change without notice.

MECHANICAL PROPERTIES

Property	Units	72 LCH1		Test Method
		Specification Limits	Typical Value	
Hardness	IRHD Shore A	N/A 70 ±5	75 70	BSISO 48 ASTM D2240 DIN 53505
Tensile Strength	MPa	5.5 min.	7.0	BS ISO 37 DIN 53504 die S1
Elongation to Failure	%	130 min.	190	BS ISO 37 DIN 53504 die S1
Compression Set 24 hours @ 150°C	%	N/A	20	BS 903 pt A6 type B DIN 53517 type II

*Further information regarding the physical properties of this material is available on request