



MATERIAL DATA SHEET

MATERIAL REFERENCE: 2J

T C Shielding material reference 2J is an extrusion and moulding grade fluorosilicone elastomer with Nickel/Graphite conductive filler. It is dark green in colour.

The material is specially compounded to offer excellent physical and electrical properties over an effective temperature range of -55 to + 160°C.

Fluorosilicones are modified chemically from silicone to offer greatly improved resistance to oils and fuels whilst retaining a wide operating temperature range.

Physical Properties:

	<i>Test methods</i>	<i>Typical values:</i>
Hardness (IRHD)	ASTM D-2240	80
Specific gravity (g/cc)	ASTM D-792	3.25
Tensile strength (MPa)	ASTM D-412	0.75
Elongation %	ASTM D-412	100 min
Compression set % 72 hrs @ 100°C	ASTM D-395	30 max

Electrical properties:

Volume resistivity (Ohm/cm)	Mil-G-83528	0.05 max
-----------------------------	-------------	----------

Shielding effectiveness (Mil-G-83528)dB:

(Mil std 285 procedure)

200KHz "H" Field	70
100MHz "E" Field	100
500MHz "E" Field	100
2GHz Plane Wave	100
10GHz Plane Wave	100

The information above is supplied in good faith and believed to be correct. This information is supplied upon the condition that persons receiving this will make their own determination as to its suitability for their purposes prior to use. TC Shielding Limited makes no representations or warranties, either expressed or implied with respect to the information or the product to which the information refers.

TC Shielding Ltd. 1995 ©

Issue 2 - January 1997
MDS-48 (Page 1 of 2)





MATERIAL DATA SHEET

Typical Fluid Resistance Properties of Cured Compound

<u>ASTM Test</u>	<u>Property</u>	<u>Typical Values for 2A, 2B, 2D & 2J.</u>
D471	Fluid Resistance JP-4 Fuel 72 hrs @ 25C (77F)	Fuel and Solvent Resistance
	Durometer A, Points Change	-5
	Tensile Strength, % Change	-50
	Elongation, % Change	-25
	Volume, % Change	+12
D-471	Fluid Resistance Fuel C 72 hrs @ 25C (77F)	
	Durometer A, Points Change	-10
	Tensile Strength, % Change	-65
	Elongation, % Change	-45
	Volume, % Change	+25
D-471	Fluid Resistance Fuel B 22 hrs @ 25C (77F)	
	Durometer A, Points Change	-10
	Tensile Strength, % Change	-60
	Elongation, % Change	-45
	Volume, % Change	+22
D-471	Fluid Resistance ASTM #2 Oil 70 hrs @ 149C (300F)	
	Durometer A, Points Change	-5
	Tensile Strength, % Change	-20
	Elongation, % Change	-10
	Volume, % Change	0
D-471	Fluid Resistance Mil-L-7808 70 hrs @ 149C (300F)	
	Durometer A, Points Change	-10
	Tensile Strength, % Change	-25
	Elongation, % Change	-15
	Volume, % Change	+10
D-471	Fluid Resistance Skydrol 500B-4 48 hrs @ 71C (160F)	
	Durometer A, Points Change	-15
	Tensile Strength, % Change	-67
	Elongation, % Change	-35
	Volume, % Change	+25
D-471	Fluid Resistance SG Motor Oil 168 hrs @ 160C (320F)	
	Durometer A, Points Change	-10
	Tensile Strength, % Change	-50
	Elongation, % Change	-20
	Volume, % Change	+5

TC Shielding. 2000 ©

Issue 1 - October 2000.

MDS - 94 (Page 2 of 2)

