E-A-R High-Performing Acoustic Material - QL SERIES



4.0

1.0

Product Description

E-A-R's QL material is a proprietary low surface weight, high-performing noise control barrier for aircraft applications. This thermoset barrier is specifically engineered for high dimensional stability, flexibility, damping and to comply with FAR 25.856(a) flammability.



1.0

Loss Factor

0.1

0.0

TYPICAL PROPERTIES	QL-20	QL-40
Material Type	Chloroprene rubber	
Color	Black	
Flammability FAR 25.853(a) Appendix F Part I (a) (1) (ii) 12 sec.	Passes	
FAR 25.856(a) Appendix F Part VI	Passes	
Nominal Thickness, in (mm)	0.024 (0.6)	0.048 (1.2)
Nominal Surface Weight, lb/ft² (kg/m²)	0.2 (1.0)	0.4 (2.0)
Peak Damping Performance at 20°C, 4kHz	0.86	
Tensile Strength, PSI (MPa) ASTM D412	946 (6.5)	1015 (7)
Tear Strength, PPI (kN/m) ASTM D624	114 (20)	121 (21)
Dimensional Stability (% Change) High Temperature, 100 Hrs at 90°C	- 0.5	
Temperature and Humidity Variations, 100 Cycles between -40°C and 70°C (Up to 95% relative humidity)	± 0.1	
RoHS Compliance RoHS 2 DIRECTIVE 2011/65/EU – Annex II, Article 4(I)	MEETS with No Exemptions	
EU REACH Regulation Article 57 SVHC effective June 2020	Passes	

3.5 Loss Factor -0.9 -0.8 -0.7 -0.7 -0.5 -0.5 -0.4 -0.4 -0.4 -0.3

800

Frequency (Hz)

Young's Modulus and Loss Factor at 20°C



Young's Modulus - - Loss Factor

80 100 125 160 200 250

Technical Information

The technical information, recommendations and other statements contained in this document are based upon tests or experience that Aearo Technologies LLC believes are reliable, but the accuracy or completeness of such information is not guaranteed.

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