



# CORK/RUBBER GASKET MATERIALS

## DK153/DK154



DK153/DK154 is a cork loaded sponged rubber material. DK153/DK154 is used as a gasket and dampening material in many industrial applications. Available with or without acrylic pressure sensitive adhesive. With PSA the product designation is DK153, without PSA the designation is DK154.

- DK153/DK154 Complies with the European Union REACH & RoHS Directives
- DK153/DK154 can be certified for contact with foodstuffs. CFR 21.177.2600 paragraphs A to D, Rubber Articles Intended for Repeated Use for Contact with Foodstuffs
- DK153 can be certified to AMS-T-6841 & other certifications on request

<b>Material</b>	Sponged SBR Rubber & Granulated Cork
<b>Thickness</b>	1/32" (0.79mm) 1/16" (1.59mm) 5/64" (1.98mm) 3/32" (2.38mm) 1/8" (3.18mm)
<b>Width</b>	1-1/4" (31.75mm) to 36" (914.4mm)
<b>Roll Length</b>	50' (15.2m) to 900' (274m)
<b>Backing</b>	Scrim cotton with or without PSA – With PSA the designation is DK153, without PSA the designation is DK154
<b>Hardness, Shore A</b>	Typical Value 42
<b>Density g/cm<sup>3</sup></b>	Typical Value .625 (or 39lb/ft <sup>3</sup> )
<b>Tensile Strength Mpa</b>	Typical Value 1.45 (or 210psi)
<b>Compressibility @ 100 PSI</b>	Typical Value 30.75%



## DK153/DK154 DATA SHEET

This data sheet covers DK153/DK154. If pressure sensitive adhesive (PSA) is applied to the material the product designation is DK153, without pressure sensitive adhesive (PSA) the designation is DK154.

DK153/DK154 is a cork loaded sponged rubber material first produced by Armstrong World Industries in the 1960s at the Braintree, Massachusetts plant and then in Mauldin, South Carolina.

### General Information

DK153/DK154 is a black SBR rubber and granulated cork that is intimately mixed, keyed to a cotton scrim backing and vulcanized. During the vulcanization process the cork, rubber and cotton backing form a permanent bond providing strength, resilience and stability to the parts fabricated from the DK153/DK154. A chemical reaction during the vulcanization process imparts sponginess to the material for improved compressibility and sealing properties. After vulcanization the DK153/DK154 is sanded to gauge. The sanding process exposes the granulated cork providing a material with high surface friction.

DK153/DK154 should be stored in a relaxed, unstressed condition. The maximum storage temperature is 85F (30C) away from ozone forming equipment such as electric motors, transformers, etc. and away from direct sunlight. Material may be stored under these conditions for up to 4 years without PSA and for 2 years with PSA.

### **ASTM Physical Property Information**

Property	Test Method	Unit	Typical Value
• Hardness	ASTM D 2240	Shore A	42
• Density	ASTM F 1315	g/cm <sup>3</sup>	.625 (or 39lb/ft <sup>3</sup> )
• Volume Change	ASTM F 146 Fuel A	%	+23.5
• Volume Change	ASTM F 146 Fuel B	%	+45.5
• Volume Change	ASTM F 146 IRM 903 (Formerly Oil #3)	%	+44.4
• Volume Change	ASTM F 146 IRM 901 (Formerly Oil #1)	%	+9.3
• Flexibility	ASTM F 147-09 IRM-901	n/a	No Cracks
• Tensile Strength	ASTM F 152(B)	Mpa	1.45 (or 210psi)
• Compressibility @ 400 PSI	ASTM F 36(B)	%	44.85
• Minimum Recovery	ASTM F 36(B)	%	91.42
• Compressibility @ 100 PSI	ASTM F 36(F)	%	30.75
• Minimum Recovery	ASTM F 36(F)	%	92.53
• Thermal Conductivity, K	ASTM F 433	W/m*K	0.120
• Max. Operating Temperature- Adhesive Type May Reduce Max. Operating Temperature		Degree C/F	104/220

**DK153/DK154 Complies with the European Union REACH & RoHS Directives**  
**DK153 can be certified to AMS-T-6841 & other certifications on request**  
**Dimensions, Tolerances & Contact Information**

• Material Thickness	1/32 (0.79mm) 1/16 (1.59mm) 5/64 (1.98mm) 3/32 (2.38mm) 1/8 (3.18mm)
• Thickness Tolerance	1/32 -0/+ .010 (0.25mm) 5/64 +/- .005 (0.13mm) All Others +/- .010 (0.25mm)
• Adhesive	PSA is an acrylic base with 60 lb. liner. Total thickness .0055 (0.14mm) Adhesive thickness .002 ( 0.05mm) Liner thickness .0035 (0.09mm)
• Widths	From 1-1/4 inch (31.75mm) to 36 inch (914.4mm)
• Roll Length	From 50 feet (15.2m) to 900 feet (274m) depending on thickness