

MATERIAL	EPDM 70 Shore FDA & USP Class VI <88> Black ASTM D 2000 M2CA 810 A25
DESCRIPTION	EPDM is a polymer of ethylene, propylene and a small amount of diene Cure system is peroxide FDA compliant to CFR 21 177-2600 and European regulations EC 1935/2004
APPLICATION	EPDM's have good resistance to ozone, ageing and weathering. They are suitable for HFC & HFD flame retardant hydraulic oils and brake fluids and have exceptional resistance to hot water, steam and acids. Approved to USP Class VI, is USP biological reactivity tested in vivo <88> and extraction tested at 121°C and is FDA compliant to CFR 21 177-2600 and European regulations EC 1935/2004. Approved to USP Class VI, USP biological reactivity tested in vitro <87> and is considered to have no cytotoxic potential.
TEMPERATURE	Low temperature service limit -40°F (-40°C) Upper temperature continuous service limit +284°F (+140°C)
PRODUCTS	Moulding (custom/O rings)

PHYSICAL PROPERTIES

ORIGINAL	STANDARD	TYPICAL VALUES
Specific Gravity	ASTM D1817	1.14
Durometer shore A (slab)	ASTM D2240	73
Elongation % (Dumbbell)	ASTM D412	299
Tensile strength Psi (Mpa) (Dumbbell)	ASTM D412	1885 (13.0)
Compression set % 22h @ 212°F (100°C) (slab)	ASTM D395B	9.4
HEAT AGEING 70h @ 212°F (100°C) ASTM D573		
Durometer change points shore A		+4
Elongation change %		+24
Tensile strength change Psi (Mpa)		-87 (+0.6)
Weight loss %		1.7
FLUID IMMERSION Oil No 3 70h @ 212°F (100°C) ASTM D471		
Volume change %		+120
Durometer change points shore A		-31
Elongation change %		-174
Tensile strength change Psi (Mpa)		-726 (-5.0)
ANTI-STATIC PROPERTIES - 80-100 kOhm THROUGH A 2MM SHEET USING A MEGGER AT <2 VOLT		
Conductivity kOhm on 2mm sheet	Megger 100 V	80-100

Information

The above information corresponds to our current knowledge and is offered solely to provide possible suggestions for your own experimentations. It is not intended to substitute any testing you may need to conduct to determine suitability of our products for your end use. Northern Engineering reserves the right to revise this information as new knowledge and experience becomes available. Northern Engineering makes no warranties and assumes no liability in connection with any use of the above information.