Nebar®
Brown

General purpose cork/nitrile jointing

General purpose, high quality cork-elastomer jointing. Below 3 mm thickness it comprises a predominately nitrile bonded cork; 3 mm and above the cork is bonded with a polychloroprene/ nitrile blend.

Recommended maximum system pressure is 0.5 MPa/5 bar but may be used for higher pressures in consultation with our Technical Support Team.

Specification
ASEA 1169 5012E - 204

Compliance
ASTM F104 Line call out -
below 3mm F224000M2,
3mm and above F225000M2

How supplied
- Precision cut gaskets to any shape, size and quantity.
- In sheets 1.2 m x 1.0 m for 2.5 mm thickness; 1.2 m x 1.2 m for 3 mm thickness.

Typical Properties Material tested to procedures as documented in ASTM F104

Typical material properties	<3mm thick	≥ 3mm thick	Test Procedure
Base elastomer	Nitrile/SBR	CR/Nitrile	
Thickness	0.8 to 2.5	3 to 13	
Hardness	65 to 85	65 to 80	ASTM D1415
Minimum tensile strength (MPa)	1.75	1.75	ASTM F152
Fluid resistance volume swells			
ASTM 1 72 hours at 100°C	-3 to +10%	0 to +10%	ASTM F146
IRM903 72 hours at 100°C	0 to +25%	+10 to +30%	ASTM F146
Fuel A 22 hours ambient temperatures	-5 to +10%	0 to +15%	ASTM F146
BS148 Transformer Oil 14 days at 90°C	+23.1%	+10%	ASTM F146
Low temperature flexibility	-20°C	-30°C	
Maximum operating temperature in fluids	110°C	110°C	
Compressibility at 2.8 N/mm²	15 to 25%	20 to 30%	ASTM F36
Recovery minimum	75%	75%	ASTM F36
Normal sheet size	1.2 x 1.0, 1.2 x 1.2	1.2 x 1.2	
Flexibility as supplied	3d	3d	ASTM F147

TEMPERATURE

Maximum Temperature in fluids:
+110°C (+230°F)
Minimum Temperature:
< 3mm -20°C (-4°F)
≥ 3mm -30°C (-22°F)

PRESSURE

Maximum Pressure:
0.5 MPa/5 bar (73 psi)

James Walker

Nebar®
Orange

Medium to firm cork/nitrile elastomer

An economical, yet high quality Neoprene/nitrile/SBR bonded cork gasket product for use in transformers and switchgear. Proven over many years in heavy electrical plant.

Recommended maximum system pressure is 0.5 MPa/5 bar but may be used for higher pressures in consultation with our Technical Support Team.

Specification
ASTM F104

Compliance
Line call out F225000M2

How supplied
- Precision cut gaskets to any shape, size and quantity.
- In sheets 1.2 m x 1.2 m. Thicknesses 1.5 mm, 2 mm, 2.5 mm, 3 mm,5 mm, 6 mm, 9.5 mm.

Typical Properties Material tested to procedures as documented in ASTM F104

Typical material properties	Units	Test Procedure
Base elastomer	Neoprene/Nitrile/SBR	
Thickness	1.0 to 13	
Hardness	65 to 80	ASTM D1415
Minimum tensile strength (MPa)	1.75	ASTM F152
Fluid resistance volume swells		
ASTM 1 72 hours at 100°C	-5 to +10%	ASTM F146
IRM903 72 hours at 100°C	0 to +30%	ASTM F146
Fuel A 22 hours ambient temperatures	0 to +15%	ASTM F146
BS148 Transformer Oil 14 days at 90°C	5 to +15%	ASTM F146
Low temperature flexibility	-30°C	
Maximum operating temperature in fluids	110°C	
Compressibility at 2.8 N/mm²	20 to 35%	ASTM F36
Recovery minimum	75%	ASTM F36
Normal sheet size	1.2 x 1.2	
Flexibility as supplied	5d	ASTM F147

TEMPERATURE

Maximum Temperature in fluids:
+110°C (+230°F)
Minimum Temperature:
-30°C (-22°F)

PRESSURE

Maximum Pressure:
0.5 MPa/5 bar (73 psi)

James Walker

Nebar®
Purple

Medium to firm cork/nitrile elastomer

A high quality medium to firm cork/elastomer jointing based on nitrile rubber.

Specifically designed to be more resistant to over-compression than normal cork/elastomer gaskets. It is suitable for a wide range of fluid sealing applications in the electrical, transformer and switchgear industries, in contact with mineral oil, silicone oil and Midel transformer fluids.

Specification
ASTM F104

Compliance
Line call out F224000M2

How supplied
- Precision cut gaskets to any shape, size and quantity.
- In sheets 1.2 m x 0.9 m for thicknesses 1.5 mm, 5 mm, 6 mm, 6.4 mm.
- Sheets 1.2 m x 1.0 m for thicknesses 1 mm, 1.5 mm, 2 mm, 2.5 mm, 3 mm, 4 mm, 5 mm, 6 mm, 6.4 mm, 8 mm, 9.5 mm..

Typical Properties Material tested to procedures as documented in ASTM F104

Typical material properties	Units	Test Procedure
Base elastomer	Nitrile/SBR	
Thickness	0.8 to 20	
Hardness	60 to 80	ASTM D1415
Minimum tensile strength (MPa)	1.75	ASTM F152
Fluid resistance volume swells		
ASTM 1 72 hours at 100°C	-5 to +15%	ASTM F146
ASTM 3 72 hours at 100°C	+5 to +20%	ASTM F146
Fuel A 22 hours ambient temperatures	+5 to +15%	ASTM F146
BS148 Transformer Oil 14 days at 90°C	+10%	ASTM F146
Low temperature flexibility	-25°C	
Maximum operating temperature in fluids	110°C	
Compressibility at 2.8 N/mm²	15 to 25%	ASTM F36
Recovery minimum	75%	ASTM F36
Normal sheet size	1.2 x 1.0	
Flexibility as supplied	5d	ASTM F147

TEMPERATURE

Maximum Temperature in fluids:
+110°C (+230°F)
Excursions up to:
+120°C (+248°F)
Minimum Temperature:
-25°C (-13°F)

PRESSURE

Maximum Pressure:
0.5 MPa/5 bar (73 psi)

James Walker

Nebar®
Red

Higher pressure electrical grade

A high quality blend of cork and polychloroprene that withstands higher pressures and gasket loading than other Nebar grades, Nebar Red is particularly suitable for use in the electrical industry and normally used in mineral oil or Midel 7131 filled transformers.

The recommended maximum system pressure is 0.6MPa/6bar but Nebar Red may be used for higher pressures in consultation with our Technical Support Team.

Specification
DTD 900/4911

Compliance
Compliance AFS 721
ASTM F104 line call out F224000M2

How supplied
- Precision cut gaskets to any shape, size and quantity.
- In sheets 1.2 m x 1.0 m for 0.75 mm thickness; sheets 1.2 m x 1.2 m for thicknesses 1.5 mm, 2.5 mm, 3 mm, 6 mm, 6.4 mm, 9.5 mm, 22 mm.

TEMPERATURE

Maximum Temperature in fluids:
+110°C (+230°F)

Minimum Temperature:
-30°C (-22°F)

PRESSURE

Maximum Pressure:
0.6 MPa/6 bar (87 psi)

Typical Properties Material tested to procedures as documented in ASTM F104

Typical material properties	Units	Test Procedure
Base elastomer	Polychloroprene	
Thickness	0.8 to 13	
Hardness	70 to 85	ASTM D1415
Minimum tensile strength (MPa)	2.35	ASTM F152
Fluid resistance volume swells		
ASTM 1 72 hours at 100°C	-5 to +5%	ASTM F146
IRM903 72 hours at 100°C	+10 to +30%	ASTM F146
Fuel A 22 hours ambient temperatures	0 to +10%	ASTM F146
BS148 Transformer Oil 14 days at 90°C	+10%	ASTM F146
Low temperature flexibility	-30°C	
Maximum operating temperature in fluids	110°C	
Compressibility at 2.8 N/mm²	10 to 30%	ASTM F36
Recovery minimum	75%	ASTM F36
Normal sheet size	1.2 x 1.2, 1.2 x 1.0	
Flexibility as supplied	5d	ASTM F147

Nebar®
White

Premium neoprene / cork electrical

A premium quality cork-elastomer jointing, based predominantly on polychloroprene. Proven over many years in heavy electrical plant.

Recommended maximum system pressure is 0.5 MPa/5 bar but may be used for higher pressures in consultation with our Technical Support Team.

Specification
ASTM F104

Compliance
Line call out F225000M2

How supplied
- Precision cut gaskets to any shape, size and quantity.
- In sheets 1.2 m x 1.2 m. Thicknesses 0.75 mm, 1 mm, 1.5 mm, 2 mm, 3 mm, 4 mm, 5 mm, 6 mm, 6.4 mm, 8 mm, 9.5 mm, 10 mm, 12.5 mm.

Typical Properties Material tested to procedures as documented in ASTM F104

Typical material properties	Units	Test Procedure
Base elastomer	Neoprene/Nitrile	
Thickness	0.8 to 13	
Hardness	65 to 80	ASTM D1415
Minimum tensile strength (MPa)	1.75	ASTM F152
Fluid resistance volume swells		
ASTM 1 72 hours at 100°C	-5 to +10%	ASTM F146
IRM903 72 hours at 100°C	+5 to +30%	ASTM F146
Fuel A 22 hours ambient temperatures	0 to +15%	ASTM F146
BS148 Transformer Oil 14 days at 90°C	+10%	ASTM F146
Low temperature flexibility	-30°C	
Maximum operating temperature in fluids	105°C	
Compressibility at 2.8 N/mm²	20 to 30%	ASTM F36
Recovery minimum	75%	ASTM F36
Normal sheet size	1.2 x 1.2	
Flexibility as supplied	5d	ASTM F147

TEMPERATURE

Maximum Temperature in fluids:
+105°C (+221°F)

Minimum Temperature:
-30°C (-22°F)

PRESSURE

Maximum Pressure:
0.5 MPa/5 bar (73 psi)

James Walker

Nebar®
Yellow

Premium nitrile / cork electrical

A nitrile based high quality cork-elastomer jointing material providing excellent resistance to a wide range of media and specifically developed to meet the requirements of the Ministry of Defence Specifications BS 2F66 and DEF 22.

Recommended maximum system pressure is 0.5 MPa/5 bar but may be used for higher pressures in consultation with our Technical Support Team.

Specification
BS 2F66

Compliance
Compliance DEF 22
ROVER GC 2403

How supplied
- Precision cut gaskets to any shape, size and quantity.
- In sheets 1.2 m x 1.0 m. Thicknesses 0.75 mm, 1 mm, 1.5 mm, 2 mm, 2.5 mm, 3 mm, 4 mm, 5 mm, 6 mm, 6.4 mm.
- Supplied with a split surface finish.

Typical Properties Material tested to procedures as documented in ASTM F104

Typical material properties	Units	Test Procedure
Base elastomer	Nitrile/SBR	
Thickness	0.8 to 13	
Hardness	65 to 75	ASTM D1415
Minimum tensile strength (MPa)	1.72	ASTM F152
Fluid resistance volume swells		
ASTM 1 72 hours at 100°C	-5 to +15%	ASTM F146
IRM903 72 hours at 100°C	+5 to +20%	ASTM F146
Fuel A 22 hours ambient temperatures	+5 to +15%	ASTM F146
BS148 Transformer Oil 14 days at 90°C	+1%	ASTM F146
Low temperature flexibility	-20°C	
Maximum operating temperature in fluids	110°C	
Compressibility at 2.8 N/mm²	20 to 30%	ASTM F36
Recovery minimum	75%	ASTM F36
Normal sheet size	1.2 x 1.0	
Flexibility as supplied	5d	ASTM F147

TEMPERATURE

Maximum Temperature in fluids:
+110°C (+230°F)
Minimum Temperature:
-20°C (-4°F)

PRESSURE

Maximum Pressure:
0.5 MPa/5 bar (73 psi)

James Walker

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NEED ADVICE?

TALK TO A TECHNICIAN

Our highly experienced technicians can advise you on the best sheet materials and manufacturing processes for a wide range of gasket applications.

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