Gaskets & Sealing Materials

Matrix L110 Gasket Material

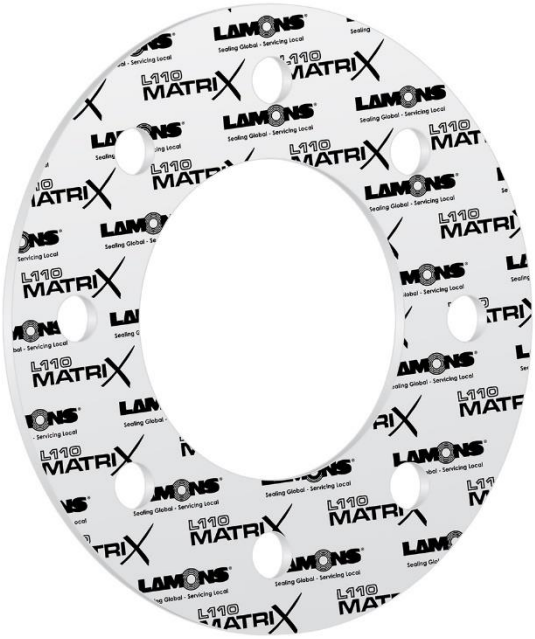
Certified System Quality ISO 9001

Matrix L110 is a premium sealing material specifically designed for use in critical piping systems where superior chemical resistance and performance is required. Produced using the HS10 method developed by DuPont® in 1960, the result is a material that has exceptional strength and stability under load. The biaxial orientation of the PTFE particles creates a unique strength where both the longitudinal and transverse directions are equally as strong. The superior matrix orientation and addition of premium barium sulphate filler allows the material to resist creep and cold flow when subjected to load and temperature.

PTFE (commonly referred to as “Teflon®” which is a trade name owned by DuPont) is a fluorocarbon solid that has a very high molecular weight. The structure consists primarily of carbon and fluorine. PTFE is very non-reactive, partly because of the strength of the carbon-fluorine bonds. For this reason it possesses exceptional chemical resistance. Because it is chemically inert, PTFE cannot be crosslinked like an elastomer which can be cured with a chemical reaction. Due to this, PTFE has little memory or recovery and is susceptible to creep and movement under load. While this feature is desirable from a conformance standpoint, it can be a detriment to maintaining load. The Matrix manufacturing process allows the addition of fillers which are consistently and precisely dispersed throughout the mix. These fillers add body and stability to the finished gasket material resulting in a superior balance of surface conformance and creep resistance. This filler system and the biaxial orientation resultant from the HS10 process results in one of the highest performance PTFE sheet gasket materials available in the market.

Matrix L110 Gasket Material is a pigment free And is commonly used in the food, pharmaceutical, and chemical handling industries.

This material complies with the requirements of TA-LUFT, FDA 21 CFR 177.1550 and can be used in aqueous hydrofluoric acid below 49% but is not suitable for sealing molten alkali metals or fluorine gas. Contact AG for information for HOBT, ROTT and EN 13555.



Visit: www.agaus.com.au

Phone: 1300 098 060

Matrix L110 Gasket Material

Technical Data:

Colour	Off White
Construction	PTFE, Barium Sulphate Filler
Density	2.9 g/cm³
Temperature Range	-268°C to 260°C
Maximum Pressure	8.5 MPa
F36 Compression	6%
F36 Recovery	40%
F152 Tensile Strength	14 MPa
F37 Liquid Leakage	<0.2 ml/hr
F38 Creep Relaxation	13%
F149 Dielectric Strength	21 kV/mm
Residual Stress, at 175ºC, BS 7531	30 MPa
DIN Residual Stress, at 175ºC	28 MPa
Gas Leakage - DIN 3535	< 0.01 mg/s-m
Gas Leakage - BS 7531	< 0.004 mL/min
ROTT Constant Gb	146
ROTT Constant a	0.375
ROTT Constant Gs	1.2
Tpmax	60460
m factor	2
y factor	12 MPa

Availability:

Associated Gaskets keep a range of Matrix PTFE Gasket Materials with L110 available in various thicknesses and in a sheet size of 1500 x 1500mm. Matrix is sold by the sheet or can be cut to suit your requirements.

AG also stock an extensive range of thermal insulation, sealing materials and specialised electrical products. For more information on these product and many more, please visit our website or call your nearest AG branch.