



GUIDE TO THE SELECTION OF O RING MATERIALS.

ELASTOMERS EPR (EPDM) ethylene propylene diene monomer

Ethylene propylene rubber Used in O-ring seals, EPR is recommended for water, chlorinated water, dilute acids and alkalines, alcohols, and has excellent resistance to ozone. EPR is not recommended for petroleum oils, di-ester lubricants, strong acids, or strong alkalines. The maximum recommended service temperature of EPR is 149°C (300°F).

FKM or VITON

Viton is DuPont-Dow Elastomers trade name for fluorocarbon elastomers. Used in O-ring seals, FKM exhibits a very broad range of chemical resistance, including petroleum oils, di-ester based lubricants, silicate fluids and greases, halogenated hydrocarbons and mineral acids. FKM is not recommended for ketones, amines, anhydrous ammonia, hot hydrofluoric or chlorosulfonic acids or automotive brake fluids. The maximum recommended service temperature of FKM is 204°C (400°F).

NITRILE (Buna-N)

Nitrile elastomer Used in O-ring seals, nitrile elastomers are recommended for petroleum oils and fluids, silicone oils and greases, Di-ester based lubricants, ethylene glycol based fluids and cold water. Nitrile is not recommended for phosphate ester hydraulic fluids, halogenated hydrocarbons, strong acids, ketone, ozone or automotive brake fluids. The maximum recommended service temperature of nitrile is 135°C (275°F)

We recommend this link for a detailed list of chemical compatibility of O ring materials.

<http://mykin.com/rubber-chemical-resistance-chart>

It is the responsibility of the design engineer & end user to determine the suitability of the product for its intended use. The information we provide is widely published & utilised throughout industry but neither Merriman or any of the manufactures we represent accept any risk or liability for consequential damages that may result due to a combination of unsuitable materials.

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