

Nitrile

Nitrile (NBR) is the most commonly specified polymer, acrylonitrile content varies from 18% to 50%. Resistance to petroleum products is enhanced with higher acrylonitrile content, however this is at the cost of a decrease in the low temperature flexibility. Standard Nitrile compounds have a medium acrylonitrile content - these are generally known as 'Medium Nitrile'. If the application demands higher or lower acrylonitrile content than medium more care must be taken choosing the right formulation.

Compounds based on Nitrile can exhibit excellent compression set, tear and abrasion resistance. They do not have good resistance to ozone, sunlight or weather (unless especially compounded). Consequently they should not be stored in direct sunlight, and should be kept away from sources of ozone (e.g. electric motors). Standard Medium Nitrile compounds can be used between -20°C and +125°C. Special formulations of Nitrile compound can extend the temperature range.

May be used for	Should not be used for
Ethylene Glycol Silicone Fluids Petroleum Fluids Water (to 100°C)	Brake fluids Ketones Ozone or weathering Phosphate esters Strong acids