

## Material Performance

- NR:** Temp Range: -55°C ... +55°C, Shore Hardness: 30 Duro...90Duro  
**Strengths:** High resilience, High tensile strength with good resistance to abrasion, tear & fatigue.  
**Weaknesses:** Susceptible to attack by ozone, poor resistance to mineral &~ petroleum based oils.
- SBR:** Temp Range: -55°C ... +70°C, Shore Hardness: 40 Duro...80Duro  
**Strengths:** Similar to NR, greater abrasion resistance, resilience, better wear resistance, low temperature flexibility and better water resistance, heat aging  
**Weaknesses:** Poor tear resistance after heating, susceptible to attack by ozone
- NITRILE:** Temp Range: -40°C ... +120°C, Shore Hardness: 40 Duro...90Duro  
**Strengths:** Excellent fuel and oil resistance, Resistance to hydrocarbons, acids and bases is good. Excellent resistance to permanent compression. Also available in an FDA compound.  
**Weaknesses:** Poor ozone and low temp performance, but these can be amended by the addition of plasticizer
- NEOPRENE:** Temp Range: -40°C ... +135°C, Shore Hardness: 40 Duro...90Duro  
**Strengths:** Good ageing, abrasion & weather resistance with some resistance to petroleum-based oils lend themselves to low flammability applications. Also available in an FDA compound.  
**Weaknesses:** Poor electrical properties, not resistant to ester lubricants & poor resistance to chemicals.
- EPDM:** Temp Range: -55°C ... +150°C, Shore Hardness: 25 Duro...80Duro  
**Strengths:** Outstanding resistance to ozone, oxygen, Light ageing, oxidative & heat ageing & many inorganic and organic chemicals, good low temperature behaviour.  
**Weaknesses:** Poor resistance to petroleum-based fluids.
- SILICONE:** Temp Range: -30°C ... +220°C, Shore Hardness: 30 Duro...90Duro  
**Strengths:** Outstanding ozone & weather resistance, good electrical properties, good temperature-range. Also available in an FDA compound.  
**Weaknesses:** Poor resistance to petroleum based fluids, has a tendency to creep.
- VITON:** Temp Range: -25°C ... +205°C, Shore Hardness: 50 Duro...90Duro  
**Strengths:** Excellent resistance to high temperatures, heat, oil, ozone, weather and chemical attack. Also available in an FDA compound.  
**Weaknesses:** Only fair low temp performance.