



Materials Guide

Cushion material type	Minimum Temperature (F)	Maximum Temperature (F)	Description / Key Attributes
Chloroprene	-40	212	Chloroprene is a 70 duro compound with good water, ozone and weather resistance typically used for automotive and ground support applications. Can be corrosive under elevated temperature and high humidity conditions. Customization available depending on specific requirement.
EPDM	-65	275	EPDM is an elastomer designed for use in commercial aircraft for wiring and tube clamps where phosphate ester hydraulic oil is used.
Nitrile	-65	275	An improved nitrile elastomer compounded to meet the most rigorous requirement of aerospace hydraulic and fuel system. Has excellent resistance to hydrocarbon based fluids, ozone, fire and corrosion. Available in 55 or 70 duro hardness. Excellent SAF compatibility. Customization available depending on specific requirement.
Ultra High Temperature Silicone	-65	600	A new ultra high temperature elastomer developed for new higher operating temperature turbine engines. Excellent fluid, fire, corrosion resistance
Low Smoke Fire Resistant Specialty Silicone	-65	400	A custom designed compound for aircraft pressurized cabin environment where fire resistance, low smoke density and toxicity requirements are essential.
Low Temp Specialty Silicone	-150	500	An ultra low temp silicone with wide operating temp range widely used for rocket and turbine engine applications
Low Outgassing Specialty Silicone	-85	500	An Elastomer developed especially for spacecraft applications where "low outgassing" is a consideration. Surpassed NASA's specification SP-R-0022A by approximately 10 fold, and does not require any supplemental baking operations.
High Strength Fabric Reinforce Specialty Silicone	-65	500	A high-strength, silicone fabric/elastomer combination with good fluid resistance and high temperature properties. Used primarily for turbine engine applications. A.Q.P.L. material perMIL-DTL-85052/3 and NASM85449/3
General Purpose Silicone	-80	437	A high-strength and resistance to deterioration by weathering, petroleum based lubricating oil, and remain flexible over the temperature range. Not suitable for contact with hydrocarbon fuels and low-aniline-point hydrocarbon fluids due to excessive swelling.
Fluorosilicone	-80	500	A fluorinated silicone with resistance of Mil-T-83133 (JP-8), Lubricating oil MIL- Mil-PRF-23699, hydraulic fluid , Mil-PRF-87252, Mil-PRF-83282, Deicer E-36 (AMS 1435), DF Plus 88 (AMS 1424), general purpose aerospace cleaning solvent DS 108
PTFE	-320	500	A PTFE based cushionis used primarily in cryogenic and chemical environments, Has good thermal stability, ageing, weathering and electrical insulation properties
Metal	-320	1300	Metal provides additional protection against galling and fretting corrosion during high temperature and extreme vibration cycles. Exceptional mechanical durability and resiliency
Fabric Cushion	-100	1000	A braided fiberglass sleeve with aluminized finish to prevent fraying of the ends