



Valve Seat Materials

Butterfly Valve Elastomer Information

Property	EPDM	Silicone	Viton® (FKM)
tensile strength	good-excellent	good	good-excellent
electrical properties	excellent	excellent	good
weather resistance	excellent	excellent	excellent
heat resistance *	excellent (275° F)	excellent (450°F)	excellent (400° F)
cold resistance *	Good-excellent (-55°F)	excellent (-80°F)	good (-20° F)
steam resistance	good	good	excellent
tear resistance	good	good	good
abrasion resistance	good-excellent	good-excellent	good
acid resistance	good-excellent	good	good
petroleum oil	poor	good	excellent
flame resistance	poor	poor	good
vegetable oil	good (most)	good (intermittent)	excellent

* Temperature information is for elastomer only, not in valve application.
EPDM or Viton® are recommended for ozone treated water

Seat Materials for Ball Valves

Code	Designation	Material	Applications
V	virgin PTFE	virgin polytetrafluoroethylene	100% PTFE. Our standard seat material. Ideal for most sanitary services. Specified for applications requiring a low co-efficient of friction. 3A and FDA approved.
G	RTFE	15% glass reinforced tetrafluoroethylene	15% glass filled = 85% PTFE. Slightly higher temperature and pressure rating than PTFE. Specified for applications requiring higher cycle life than PTFE. 3A and FDA approved.
C	25% carbon PTFE	25% carbon reinforced tetrafluoroethylene	25% carbon + 75% PTFE. Specified for higher temperature pressure applications. Ideal for steam and thermal fluid applications. Higher cycle life than RTFE.
S	SS reinforced PTFE	50% stainless steel filled tetrafluoroethylene	50% SS = 50% PTFE. Specified for higher temperature pressure applications in a sanitary process. 3A and FDA approved.
U	UHMW	ultra high molecular weight polyethylene	Specified for its low modulus of abrasion and minimal property degradation when exposed to moderate levels of radiation. Ideal for applications where fluorocarbons are not acceptable. 3A and FDA approved.

V