



Chemical and Material Compatibility Test

Summary

Date: October 18, 2002 Chemical Name: GT-157 Pressure: 14.7 psi

Engineer: Travis Thibodeaux Test Duration: Four Weeks Temperature: Set

Chemical GT-157 - Test results for elastomers.

Material:	FKM	HNBR	NBR	Neoprene
Rating @ 140 °F	C	A	B	B
Rating @ 200 °F	C	A	B	B

- 1.) FKM = (A Type Fluorocarbon or Viton)
- 2.) NBR = (Nitrile Rubber or Buna N)
- 3.) HNBR = (Hydrogen Nitrile Rubber)
- 4.) Neoprene = (Chloroprene Rubber or CR)

Chemical GT-157 - Test results for metals.

Material:	1018	304	316
CR (mpy) @ 140 °F	0.24	0	0
CR (mpy) @ 200 °F	0.42	0	0

Note: In most applications 2mpy is acceptable.

$$CR(mpy) = \frac{(534)(\text{mass loss})}{D A T}$$

D= Density

A= Surface Area

T= Time (hrs)

- 1.) 1018 = Low Alloy Steel
- 2.) 304 = Stainless Steel
- 3.) 316 = Stainless Steel

Chemical GT-157- Test results for thermoplastics.

Material:	Nylon	HDPE	PP	PVC	Teflon
Rating @ 140 °F	A	A	A	A	A
Rating @ 200 °F	A	A	A	A	A

- 1.) Nylon = (Virgin 11)
- 2.) HDPE = (High Density Polyethylene)
- 3.) PP = (Polypropylene)
- 4.) PVC = (Polyvinylchloride)
- 5.) Teflon = (Polytetrafluoroethylene)

*Rating Key: A = This material is compatible with this chemical at this temperature.

B = This material is usable in this environment but, is not recommended.

C = This material is not recommended; not compatible.