ELECTRONIC FLUOROCARBONS, LLC

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Valve Gas Compatibility Chart

	Materials of Construction				
Gas	**Brass**	**Stainless Steel**	**Aluminum**	**Copper**	**Monel**
Ammonia	X	✓	✓	X	✓
Arsine	✓	✓	*	✓	✓
Boron Trichloride	X	✓	X	*	✓
Boron Trifluoride	✓	✓	*	✓	✓
n-Butane	✓	✓	✓	✓	✓
1-Butene	✓	✓	*	✓	✓
cis-2-Butene	✓	✓	✓	✓	✓
Carbon Monoxide	✓	✓	*	✓	✓
Carbonyl Sulfide	✓	✓	✓	✓	✓
Chlorine	X	✓	X	X	✓
Deuterium	✓	✓	*	✓	✓
Diborane	✓	✓	✓	✓	✓
Ethane	✓	✓	*	✓	✓
Ethylene	✓	✓	*	✓	✓
Ethylene Oxide	✓	✓	X	X	(-)
Fluorine	*	✓	*	*	✓
Helium	✓	✓	✓	✓	✓
Hexafluoroethane	✓	✓	✓	✓	✓
Hydrogen Brominde	X	✓	X	X	✓
Hydrogen Chloride	X	✓	X	X	✓
Hydrogen Fluoride	X	✓	X	X	✓
Hydrogen Sulfide	X	✓	*	(-)	✓
Isobutane	✓	✓	*	✓	✓
Isobutylene	✓	✓	*	✓	✓
Isopentane	✓	✓	✓	✓	✓
Krypton	✓	✓	✓	✓	✓
Methane	✓	✓	*	✓	✓
Methyl Chloride	✓	✓	X	✓	✓
Methyl Fluoride	✓	✓	✓	✓	✓
Methyl Mercaptan	✓	✓	X	X	X
Neon	✓	✓	✓	✓	✓
Nitric Oxide	X	✓	*	✓	✓
Nitrogen Dioxide	X	✓	*	X	✓
Nitrogen Trifluoride	*	*	(---)	*	*
Nitrous Oxide	✓	✓	*	✓	✓
Octafluorocyclobutane	✓	✓	✓	✓	✓
Octafluoropropane	✓	✓	✓	✓	✓
Phosphine	✓	✓	*	(---)	✓
Propane	✓	✓	*	✓	✓
Propylene	✓	✓	*	✓	✓
Silane	✓	✓	*	✓	✓
Silicon Tetrafluoride	X	✓	X	X	✓
Sulfur Hexafluoride	✓	✓	✓	✓	✓
Tetrafluoromethane	✓	✓	✓	✓	✓
Trans-2-butene	✓	✓	✓	✓	✓
Trifluoromethane	✓	✓	✓	✓	✓
Xenon	✓	✓	✓	✓	✓

Key: ✓= Satisfactory for use with the intended gas at a normal operating temperature of 70°F.

X= Unsatisfactory for use with the intended gas

(-) = Insufficient data available to determine the compatibility with the intended gas

***** = Depends on condition of use

This is not an exhaustive list, but rather a guide to some our offerings. Please contact us for more information.

**Sources: Airgas, ADVANCED Specialty Gas Equipment, & Praxair*