

MATERIALS COMPATIBILITY CHART

Gas	CAS Number	Metals					Plastics					Elastomers					Lub.	
		Aluminum	Brass	Copper	Carbon Steel	Stainless Steel	PTFE	PCTFE	PVDF	PA	PP	Buthyl Rubber	Nitrile Rubber	Chloroprene	FKM	Silicon	Ethylene-Propylene	Hydrocarbon Based
1,3 Butadiene	106-99-0	1	1	1	1	1	1	1	1	1	4	4	4	1	4	4	4	1
1-Butene	106-98-9	1	1	1	1	1	1	1	1	1	4	1	4	1	4	4	4	1
1-Butyne	107-00-6	1	4	4	1	1	0	0	0	0	0	0	0	0	0	0	0	0
Acetylene	74-86-2	1	3	4	1	1	1	1	3	1	1	4	4	4	4	1	4	4
Air	132259-10-0	1	1	1	2	1	0	0	0	0	0	0	0	0	0	0	0	0
Ammonia	7664-41-7	1	4	4	1	1	1	1	4	1	1	3	0	4	4	1	4	1
Argon	7440-37-1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Arsine	7784-42-1	1	1	1	3	3	1	1	1	1	0	1	1	1	1	1	4	4
Boron Trichloride	10294-34-5	4	4	4	2	2	1	1	1	4	1	4	4	4	1	4	4	1
Boron Trifluoride	7637-07-2	4	4	4	2	2	1	1	1	4	1	4	4	4	1	4	4	1
Carbon Dioxide	124-38-9	1	1	1	2	1	1	1	1	1	4	4	4	4	3	3	1	1
Carbon Monoxide	630-08-0	1	1	1	2	1	1	1	1	1	3	1	1	4	1	1	1	1
Carbonyl Sulfide	463-58-1	1	1	1	2	1	1	1	1	0	4	4	4	1	1	4	4	4
Chlorine	7782-50-5	4	2	2	2	2	1	1	1	4	4	4	4	1	4	4	4	1
Chlorodifluoromethane (R22)	75-45-6	1	1	1	1	1	3	3	0	1	3	3	4	3	4	4	1	4
Chlorotrifluoromethane (R13)	75-72-9	1	1	1	1	1	1	3	0	1	1	1	3	1	4	1	4	4
cis-2-Butene	590-18-1	1	1	1	1	1	1	1	1	1	4	1	4	1	4	4	4	1
Cyanogen	506-77-4	1	4	4	2	2	1	1	1	0	1	4	4	4	1	1	4	4
Cyclopropane	75-19-4	1	1	1	1	1	1	1	0	0	0	4	1	4	1	4	4	1
Deuterium	7782-39-0	1	1	1	3	3	3	1	1	1	3	1	1	1	3	1	1	1
Diborane	19287-45-7	1	1	1	3	3	1	1	1	1	1	1	1	1	1	1	4	4
Dichlorodifluoromethane (R12)	75-71-8	1	1	1	1	1	3	3	0	1	1	4	3	1	3	4	4	4
Dichlorosilane	4109-96-0	4	2	2	2	2	1	1	1	4	0	4	0	4	1	1	4	4
Dimethyl Ether	115-10-6	1	1	1	1	1	1	0	1	0	0	0	1	4	0	0	1	4
Dimethylamine	124-40-3	1	4	4	1	1	1	0	4	0	0	1	3	4	4	4	1	1
Ethane	74-84-0	1	1	1	1	1	1	1	1	1	4	1	4	1	4	4	1	1
Ethyl Chloride (R160)	75-00-3	4	1	1	1	1	1	3	0	0	0	1	1	1	1	4	1	4

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Ethylamine	75-04-4	1	4	4	1	1	1	0	0	4	0	4	4	4	4	4	1	4	4
Ethylene	74-85-1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	1	1
Fluorine	7782-41-4	4	2	2	2	2	4	4	4	4	4	4	4	4	4	4	4	4	4
Germane	7782-65-2	1	1	1	3	3	1	1	1	1	0	1	1	1	1	1	1	4	4
Helium	7440-59-7	1	1	1	1	1	3	1	1	1	3	1	1	1	1	3	1	1	1
Hexafluoroethane (R116)	76-16-4	1	1	1	1	1	1	3	1	1	1	1	1	1	1	1	4	4	
Hexafluoropropylene (R1216)	116-15-4	1	1	1	1	1	1	3	0	1	0	0	0	0	0	0	4	4	
Hydrogen	1333-74-0	1	1	1	3	3	3	1	1	1	3	1	1	1	1	3	1	1	1
Hydrogen Bromide	10035-10-6	4	4	4	2	2	1	1	1	4	0	4	4	4	1	4	1	4	4
Hydrogen Chloride	7647-01-0	4	4	4	2	2	1	1	1	4	0	4	4	4	1	4	1	4	4
Hydrogen Fluoride	7664-39-3	4	4	4	2	2	1	1	1	4	0	4	4	4	1	4	1	4	4
Hydrogen Sulfide	7783-06-4	1	1	1	3	3	1	1	1	1	0	3	4	4	4	4	1	4	4
Isobutane	75-28-5	1	1	1	1	1	1	1	1	1	1	4	1	4	4	4	1	4	4
Isobutene	115-11-7	1	1	1	1	1	1	1	1	1	1	4	1	4	1	4	4	4	1
Krypton	7439-90-9	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Methane	74-82-8	1	1	1	1	1	1	1	1	1	1	4	1	1	1	4	4	1	1
Methyl Bromide (R40B1)	74-83-9	4	1	1	2	2	1	1	0	0	0	4	4	4	1	0	4	4	4
Methyl Chloride (R40)	74-87-3	4	1	1	1	1	1	1	0	0	0	4	4	4	1	4	4	4	4
Methyl Mercaptan	74-93-1	1	1	1	3	3	1	1	1	1	0	4	4	4	4	1	1	4	4
Methylamine	74-89-5	1	4	4	1	1	1	1	4	1	1	1	3	4	4	4	1	4	1
n-Butane	106-97-8	1	1	1	1	1	1	1	1	1	1	4	1	1	1	4	4	4	1
Neon	7440-01-9	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Nitric Oxide	10102-43-9	2	4	4	2	2	3	3	3	4	4	4	4	4	3	4	4	4	4
Nitrogen	7727-37-9	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Nitrogen Dioxide	10102-44-0	2	4	4	2	2	1	1	4	4	4	4	4	4	4	4	4	4	4
Nitrogen Trifluoride	7783-54-2	1	1	1	1	1	1	1	1	0	0	0	0	0	0	0	4	1	1
Nitrous Oxide	10024-97-2	1	2	2	2	1	1	1	3	3	3	4	4	4	4	1	4	4	1

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Octafluorocyclobutane (RC318)	115-25-3	1	1	1	1	1	1	3	0	1	0	1	1	1	3	0	1	4	4
Octafluoropropane (R218)	76-19-7	1	1	1	1	1	1	3	0	1	0	1	1	1	1	3	1	4	4
Oxygen	7782-44-7	1	1	1	2	1	3	3	3	3	3	4	4	3	3	4	3	4	3
Phosgene	75-44-5	4	2	2	2	2	1	1	1	4	0	4	4	4	1	4	1	4	4
Phosphine	7803-51-2	1	1	1	3	3	1	1	1	4	0	1	1	1	1	1	1	4	4
Propadiene	463-49-0	1	1	1	1	1	1	1	1	3	1	1	0	0	0	0	0	4	1
Propane	74-98-6	1	1	1	1	1	1	1	1	1	1	4	1	4	1	4	4	4	1
Propylene	115-07-1	1	1	1	1	1	1	1	1	0	1	4	4	4	0	4	4	4	1
Propyne-1	74-99-7	1	3	4	1	1	1	1	1	3	1	1	0	0	0	0	0	4	1
Silane	7803-62-5	1	1	1	3	3	1	1	1	0	0	1	0	1	1	0	1	4	4
Silicon Tetrafluoride	7783-61-1	2	2	2	2	2	1	1	1	4	0	4	4	4	1	4	1	4	4
Sulfur Dioxide	7446-09-5	1	2	2	2	2	1	1	1	4	1	0	4	4	4	4	1	4	4
Sulfur Hexafluoride	2551-62-4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Tetrachlorosilane	10026-04-7	4	2	2	2	2	1	1	1	4	0	4	4	4	1	4	1	4	4
Tetrafluoroethane (R134A)	811-97-2	4	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Tetrafluoromethane (R14)	75-73-0	1	1	1	1	1	3	1	1	1	1	1	1	1	1	1	1	4	1
trans-2-Butene	624-64-6	1	1	1	1	1	1	1	1	1	1	4	1	4	1	4	4	4	1
Trifluoromethane (R23)	75-46-7	1	1	1	1	1	3	1	1	1	1	1	1	1	1	1	1	4	1
Trimethylamine	75-50-3	1	4	4	1	1	1	4	4	4	0	1	3	4	4	4	1	4	4
Tungsten Hexafluoride	7783-82-6	4	0	4	2	2	1	1	1	0	0	4	4	4	0	4	1	4	4
Vinyl Chloride (R1140)	75-01-4	4	3	4	2	2	1	3	0	0	0	0	0	0	1	3	0	4	4
Xenon	7440-63-3	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1

Legend

No data	0
Satisfactory	1
Satisfactory but risk of corrosion in presence of moisture	2
Acceptable under certain conditions (contact us or check our web site)	3
Non recommended	4

PTFE: Polytetrafluoroethylene

PCTFE: Polychlorotrifluoroethylene

PVDF: Vinylidene polyfluoride, KYNAR™

PP: Polypropylene

PA: Polyamides, NYLON™

FKM: Chlorofluorocarbon, VITON™

Lub: Lubricants