

Process Seal O-Ring Chemical Compatibility

Level Measurement



This document is for general reference only and is not a specific recommendation for any application. Users are responsible for their own interpretation and use of information found herein. Specifications are subject to change without prior notice. Verification of product specifications prior to purchase is recommended.

Measurement made easy

KALRAZ®

FFKM (FFPM)

A low compression set compound for general-purpose use in O-rings, diaphragms, seals, and other parts used in the process and aircraft industries. It is a carbon black-filled compound with excellent chemical resistance, good mechanical properties, and outstanding hot air aging properties. It exhibits low swell in organic and inorganic acids and aldehydes and has good response to temperature cycling effects. This compound is not recommended for use in hot water/steam applications or in contact with certain hot aliphatic amines, ethylene oxide and propylene oxide. Refer to the Elastomer Chemical Compatibility Chart for a more detailed list of chemical interactions.

VITON®

FKM (FPM)

The Viton® A is a fluoroelastomer dipolymer comprised of vinylidene fluoride and hexafluoropropylene. It provides good chemical resistance to petroleum products and solvents. Avoid polar solvents, amines, anhydrous ammonia, hydrazine and hot acids. Refer to the Elastomer Chemical Compatibility Chart for a more detailed list of chemical interactions.

EPDM

Excellent resistance to water, steam, and polar solvents, as well as ozone and sunlight. Also resistant to alcohols, glycol and phosphate ester hydraulic fluid. Avoid non-polar solvents, petroleum oil, and aromatic fuels. Refer to the Elastomer Chemical Compatibility Chart for a more detailed list of chemical interactions.

Markez®

FFKM (FFPM)

For demanding sealing applications in various industries, like Petrochemical, and where harsh solvents are required, this compound offers an almost universal chemical compatibility for use in semiconductor, oil and gas, and general chemical applications. Its unique, cross-linking processing results in an enhanced chemical resistance to strong acids and amine resistance, and it has excellent resistance to fuels, all types of lubricating oils and greases, mineral-based and fire-resistant hydraulic fluids, solvents, alcohols, most acids and alkalis. Refer to the Elastomer Chemical Compatibility Chart for a more detailed list of chemical interactions.

O-Ring Chemical Compatibility

The following chemical compatibility chart is for reference only. ABB assumes no responsibility for the accuracy of the following information and strongly suggests testing compatibility before use.

1= Excellent 2= Good 3 = Poor 4 = Not Recommended - = No Information	Kalrez	Viton	EPDM	Markez
ABIETIC ACID	1			1
ACETALDEHYDE	2	4	2	2
ACETAMIDE	1	2	1	1
ACETANILIDE	1	3	1	1
ACETIC ACID AMIDE	1	3	1	1
ACETIC ACID ETHYL ESTER	1	4	2	1
ACETIC ACID METHYL ESTER	1	4	2	1
ACETIC ACID, 25% TO 60%	1	3	1	1
ACETIC ACID, 5%	1	1	1	1
ACETIC ACID, 85%	1	3	-	1
ACETIC ACID, GLACIAL	1	4	2	1
ACETIC ALDEHYDE	2	4	2	2
ACETIC ANHYDRIDE	1	4	2	1
ACETIC ESTER	1	4	2	1
ACETOACETIC ACID	1	4	1	1
ACETOL	1	4	1	1
ACETONE	1	4	1	1
ACETONE CYANOHYDRIN	1	4	1	1
ACETONITRILE	1	4	1	1
ACETOPHENETIDINE	1	1	4	1
ACETOPHENONE	1	4	1	1
ACETOTOLUIDIDE	1	1	4	1
ACETYL ACETONE	1	4	1	1
ACETYL BENZENE	1	4	1	1
ACETYL BROMIDE	1	1	1	1
ACETYL CHLORIDE	1	1	4	1
ACETYLENE	1	1	1	1
ACETYLENE DICHLORIDE	1	2	4	1
ACETYLENE TETRABROMIDE	1	1	1	1
ACETYLENE TETRACHLORIDE	1	1	1	1
ACETYL SALICYLIC ACID	1	1	4	1
ACROLEIN	1	4	1	1
ACRYIMIDE	1	3	1	1
ACRYLIC ACID, ETHYL ESTER	1	4	3	1
ACRYLONITRILE	1	4	4	1
ADIPIC ACID	1	2	2	1
ALIPHATIC DICARBOXYLIC ACID	1	1	4	1
ALKANES	1	1	4	1
ALKANESULFONIC ACID	1	1	4	1
ALKAZENE	1	2	4	1
ALKENES	1	1	4	1
ALKYL ACETONE	1	4	1	1
ALKYL ALCOHOL	1	4	4	1
ALKYL AMINE	1	4	4	1
ALKYL ARYL SULFONATES	1	1	4	1
ALKYL ARYL SULFONICS	1	1	4	1
ALKYL BENZENE	1	2	4	1
ALKYL CHLORIDE	1	2	4	1
ALKYL NAPHTHALENE SULFONIC ACID	1	1	4	1
ALKYL SULFIDE	1	1	4	1
ALLYL ALCOHOL	1	4	1	1
ALLYL CHLORIDE	1	2	1	1
ALLYLIDENE DIACETATE	1	3	1	1
ALPHA PICOLINE	1	3	1	1
ALUM POTASH	1	4	1	1
ALUMINUM ACETATE	1	4	1	1
ALUMINUM BROMIDE	1	1	1	1
ALUMINUM CHLORATE	1	3	1	1

1= Excellent 2= Good 3 = Poor 4 = Not Recommended - = No Information	Kalrez	Viton	EPDM	Markez
ALUMINUM CHLORIDE	1	1	1	1
ALUMINUM FLUORIDE	1	1	1	1
ALUMINUM FORMATE	1	4	3	1
ALUMINUM HYDRATE	1	2	2	1
ALUMINUM HYDROXIDE	1	1	2	1
ALUMINUM LINOLEATE	1	1	1	1
ALUMINUM NITRATE	1	1	1	1
ALUMINUM OXALATE	1	3	3	1
ALUMINUM PHOSPHATE	1	1	1	1
ALUMINUM POTASSIUM SULFATE	1	1	3	1
ALUMINUM SALTS	1	1	1	1
ALUMINUM SODIUM SULFATE	1	1	3	1
ALUMINUM SULFATE	1	1	1	1
ALUMS	1	1	1	1
AMINES MIXED (ALLYL, ETHYL, ETC.)	1	4	4	1
AMINO BENZENE	1	2	4	1
AMINO BENZOIC ACID	1	2	4	1
AMINOETHANOL (2-AMINOETHANOL)	1	4	4	1
AMINOMETHANE	1	4	4	1
AMINOPYRIDINE	1	4	4	1
AMMONIA	2	4	2	2
"AMMONIA AND LITHIUM METAL IN SOLUTION"	4	4	4	4
AMMONIA GAS, COLD	1	4	1	1
AMMONIA GAS, HOT	1	4	4	1
AMMONIA, ANHYDROUS LIQUID	1	4	2	1
AMMONIUM ACETATE	1	4	1	1
AMMONIUM ARSENATE	1	3	3	1
AMMONIUM BENZOATE	1	3	3	1
AMMONIUM BICARBONATE	1	4	3	1
AMMONIUM BISULFITE	1	3	3	1
AMMONIUM BROMIDE	1	1	1	1
AMMONIUM CARBAMATE	1	3	3	1
AMMONIUM CARBONATE	1	1	4	1
AMMONIUM CHLORIDE	1	1	1	1
AMMONIUM CITRATE, DIBASIC	1	3	3	1
AMMONIUM DICHROMATE	1	3	3	1
AMMONIUM DIPHOSPHATE	1	1	3	1
AMMONIUM FLUORIDE	1	1	1	1
AMMONIUM FORMATE	1	3	3	1
AMMONIUM HYDROXIDE, 3 MOLAR	2	3	1	2
"AMMONIUM HYDROXIDE, CONCENTRATED"	1	2	4	1
AMMONIUM HYDROXIDE, GRADE 2	1	2	3	1
AMMONIUM IODIDE	1	1	1	1
AMMONIUM LACTATE	1	3	3	1
AMMONIUM METAPHOSPHATE	1	3	3	1
AMMONIUM MOLYBDENATE	1	3	3	1
AMMONIUM NITRATE	1	1	1	1
AMMONIUM NITRITE	1	3	1	1
AMMONIUM OXALATE	1	3	3	1
AMMONIUM PERCHLORATE	1	3	3	1
AMMONIUM PERSULFATE	1	1	4	1
AMMONIUM PHOSPHATE	1	1	1	1
AMMONIUM PHOSPHATE, DIBASIC	1	1	1	1
AMMONIUM PHOSPHATE, MONO-BASIC	1	1	1	1
AMMONIUM PHOSPHATE, TRIBASIC	1	1	1	1
AMMONIUM PHOSPHITE	1	3	3	1

O-Ring Chemical Compatibility

The following chemical compatibility chart is for reference only. ABB assumes no responsibility for the accuracy of the following information and strongly suggests testing compatibility before use.

1= Excellent 2= Good 3 = Poor 4 = Not Recommended - = No Information	Kalrez	Viton	EPDM	Markez
AMMONIUM PICRATE	1	3	1	1
AMMONIUM POLYSULFIDE	1	3	1	1
AMMONIUM SALICYLATE	1	3	1	1
AMMONIUM SALTS	1	3	1	1
AMMONIUM SULFAMATE	1	4	1	1
AMMONIUM SULFATE	1	2	1	1
AMMONIUM SULFATE NITRATE	1	4	1	1
AMMONIUM SULFIDE	1	2	1	1
AMMONIUM SULFITE	1	1	1	1
AMMONIUM THIOCYANATE	1	1	1	1
AMMONIUM THIOGLYCOLLATE	1	3	1	1
AMMONIUM THIOSULFATE	1	1	1	1
AMMONIUM TUNGSTATE	1	3	1	1
AMMONIUM VALERATE	1	3	1	1
AMYL ACETATE	1	4	1	1
AMYL ALCOHOL	1	2	1	1
AMYL BORATE	1	1	4	1
AMYL BUTYRATE	1	2	4	1
AMYL CHLORIDE	1	1	4	1
AMYL CHLORONAPHTHALENE	1	1	4	1
AMYL CINNAMIC ALDEHYDE	1	4	4	1
AMYL HYDRIDE	1	1	4	1
AMYL LAURATE	1	2	4	1
AMYL MERCAPTAN	1	1	4	1
AMYL NAPHTHALENE	1	1	4	1
AMYL NITRATE	1	3	1	1
AMYL NITRITE	1	3	1	1
AMYL PHENOL	1	1	-	1
AMYL PROPIONATE	1	2	4	1
ANILINE	1	2	2	1
ANILINE DYES	1	2	2	1
ANILINE HYDROCHLORIDE	1	2	3	1
ANILINE OIL	1	4	2	1
ANILINE SULFATE	1	3	1	1
ANILINE SULFITE	1	3	1	1
ANIMAL FATS	1	1	2	1
ANIMAL OIL	1	1	2	1
ANISOLE	1	3	-	1
ANON	1	-	4	1
ANSUL ETHER 161, 181	1	4	3	1
ANT OIL	2	4	2	2
ANTHRACENE	1	1	4	1
ANTHRAQUINONE SULPHONIC ACID	1	-	1	1
ANTIMONY CHLORIDE	1	2	1	1
ANTIMONY PENTACHLORIDE	1	2	4	1
ANTIMONY PENTAFLUORIDES	2	-	-	2
ANTIMONY TRIBROMIDE	1	1	4	1
ANTIMONY TRICHLORIDE	1	1	1	1
ANTIMONY TRIFLUORIDE	2	1	4	2
ANTIMONY TRIOXIDE	1	1	1	1
AQUA REGIA	2	2	3	2
ARGON	1	1	1	1
ARGON GAS	1	1	1	1
AROCLOR 1248	1	1	2	1
AROCLOR 1254	1	1	2	1
AROCLOR 1260	1	1	2	1
AROMATIC FUEL 50%	1	1	4	1
AROMATIC FUELS	1	2	4	1

1= Excellent 2= Good 3 = Poor 4 = Not Recommended - = No Information	Kalrez	Viton	EPDM	Markez
ARSENIC ACID	1	1	1	1
ARSENIC TRICHLORIDE	1	4	1	1
ARSENIC TRIOXIDE	1	4	1	1
ARSENIC TRISULFIDE	1	4	1	1
ASCORBIC ACID	1	1	3	1
ASKAREL	1	1	2	1
ASPARTIC ACID	1	3	3	1
ASPHALT	1	1	2	1
ASTM FUEL A	1	1	1	1
ASTM FUEL B	1	1	2	1
ASTM FUEL C	1	1	2	1
ASTM FUEL D	1	1	2	1
ASTM OIL NO. 1	1	1	1	1
ASTM OIL NO. 2	1	1	1	1
ASTM OIL NO. 3	1	1	1	1
ASTM OIL NO. 4	1	1	2	1
ASTM OIL NO. 5	1	1	1	1
AZINE	1	4	4	1
BAKING SODA	1	1	1	1
BARIUM CARBONATE	1	1	3	1
BARIUM CHLORATE	1	1	3	1
BARIUM CHLORIDE	1	1	1	1
BARIUM CYANIDE	1	1	1	1
BARIUM HYDROXIDE	1	1	1	1
BARIUM IODIDE	1	1	1	1
BARIUM NITRATE	1	1	3	1
BARIUM OXIDE	1	1	1	1
BARIUM PEROXIDE	1	3	3	1
BARIUM POLYSULFIDE	1	3	3	1
BARIUM SALTS	1	1	1	1
BARIUM SULFATE	1	1	1	1
BARIUM SULFIDE	1	1	1	1
BEER	1	1	1	1
BEET SUGAR LIQUIDS	1	1	1	1
BEET SUGAR LIQUORS	1	1	1	1
BENZALDEHYDE	2	4	4	2
BENZAMIDE	1	1	2	1
BENZANTHRONE	1	2	2	1
BENZENE	1	2	4	1
BENZENE CARBONAL	2	4	4	2
BENZENE CARBOXYLIC ACID	1	1	4	1
BENZENE SULFONIC ACID	1	1	4	1
BENZIDINE	1	1	2	1
BENZIDINE 3 SULFONIC ACID	1	1	2	1
BENZIL	1	1	2	1
BENZILIC ACID	1	1	2	1
BENZINE	1	1	1	1
BENZOCATECHOL	1	1	2	1
BENZOCHLORIDE	1	1	4	1
BENZOIC ACID	1	1	4	1
BENZOIN	1	1	2	1
BENZONITRILE	1	3	3	1
BENZOPHENONE	1	2	4	1
BENZOQUINONE	1	1	-	1
BENZOTRICHLORIDE	1	1	4	1
BENZOTRIFLUORIDE	1	1	4	1
BENZOYL CHLORIDE	1	2	4	1
BENZOYL SULFONILIC ACID	1	1	2	1

O-Ring Chemical Compatibility

The following chemical compatibility chart is for reference only. ABB assumes no responsibility for the accuracy of the following information and strongly suggests testing compatibility before use.

1= Excellent 2= Good 3 = Poor 4 = Not Recommended - = No Information	Kalrez	Viton	EPDM	Markez
BENZYL ACETATE	1	4	1	1
BENZYL ALCOHOL	1	1	2	1
BENZYL BENZOATE	1	1	2	1
BENZYL BROMIDE	1	1	4	1
BENZYL BUTYL PHTHALATE	1	3	1	1
BENZYL CHLORIDE	1	1	4	1
BENZYL PHENOL	1	2	4	1
BENZYL SALICYLATE	1	1	4	1
BERYLLIUM CHLORIDE	1	1	1	1
BERYLLIUM FLUORIDE	1	1	1	1
BERYLLIUM OXIDE	1	1	1	1
BERYLLIUM SULFATE	1	3	1	1
BIPHENYL	1	1	4	1
BISMUTH CARBONATE	1	1	1	1
BISMUTH NITRATE	1	3	1	1
BISMUTH OXYCHLORIDE	1	3	1	1
BISULFITE LYE	2	-	1	2
BITUMEN	1	1	-	1
BLACK LIQUOR	3	1	2	3
BLACK LYE	1	1	1	1
BLEACH LIQUOR	1	1	1	1
BLEACH SOLUTIONS	1	1	1	1
BLEACHING LYE	1	2	1	1
BONE OIL	1	2	2	1
BORAX	1	1	1	1
BORAX SOLUTIONS	1	1	1	1
BORDEAUX MIXTURE	1	1	1	1
BORIC ACID	1	1	1	1
BORIC OXIDE	1	3	1	1
BORNEOL	1	2	4	1
BORNYL ACETATE	1	4	4	1
BORNYL CHLORIDE	1	1	4	1
BORNYL FORMATE	1	1	4	1
BORON FLUIDS	1	1	4	1
BORON TRICHLORIDE	1	1	4	1
BORON TRIFLUORIDE	1	1	4	1
BRINE	1	1	1	1
BROMIC ACID	1	3	1	1
BROMINE	1	1	4	1
BROMINE PENTAFLUORIDE	2	4	4	2
BROMINE TRIFLUORIDE	2	4	4	2
BROMINE WATER	1	1	2	1
BROMINE, ANHYDROUS	1	1	4	1
BROMINE, LIQUID	-	-	-	-
BROMOBENZENE	1	1	4	1
BROMOBENZENE CYANIDE	1	3	1	1
BROMOCHLOROMETHANE	1	4	2	1
BROMOCHLOROTRIFLUOROETHANE	1	1	4	1
BROMOETHANE	1	1	4	1
BROMOFORM	1	1	4	1
BROMOMETHANE	1	1	4	1
BROMOTRIFLUOROMETHANE	2	1	1	2
BRUCINE SULFATE	1	3	1	1
BUNKER OIL	1	1	4	1
BUNKER C FUEL OIL	1	1	4	1
BUTADIENE	1	3	4	1
BUTANE	1	1	4	1
BUTANE, 2, 2-DIMETHYL	1	1	4	1

1= Excellent 2= Good 3 = Poor 4 = Not Recommended - = No Information	Kalrez	Viton	EPDM	Markez
BUTANE, 2, 3-DIMETHYL	1	1	1	1
BUTANEDIOL	1	3	1	1
BUTANOL	1	1	4	1
BUTENE 2-ETHYL	1	1	1	1
BUTTER	1	1	1	1
BUTYL ACETATE	1	4	4	1
BUTYL ACETYL RICINOLEATE	1	1	2	1
BUTYL ACRYLATE	1	4	4	1
BUTYL ALCOHOL	1	1	1	1
BUTYL BENZOATE	1	1	4	1
BUTYL BUTYRATE	1	1	4	1
BUTYL CARBITOL	1	3	4	1
BUTYL CELLOSOLVE	1	4	3	1
BUTYL CELLOSOLVE ACETATE	1	4	4	1
BUTYL CELLOSOLVE ADIPATE	1	2	4	1
BUTYL CHLORIDE	1	1	1	1
BUTYL ETHER	1	4	3	1
BUTYL GLYCOLATE	1	3	3	1
BUTYL LACTATE	1	3	3	1
BUTYL LAURATE	1	2	3	1
BUTYL MERCAPTAN	1	4	4	1
BUTYL METHACRYLATE	1	4	3	1
BUTYL OLEATE	1	1	4	1
BUTYL OXALATE	1	3	3	1
BUTYL PHENOL	1	2	4	1
BUTYL STEARATE	1	1	2	1
BUTYLAMINE	1	4	3	1
BUTYLBENZOIC ACID	1	1	2	1
BUTYLENE	1	1	2	1
BUTYLENE GLYCOL	1	2	1	1
BUTYNE DIOL	2	2	1	2
BUTYRALDEHYDE	2	4	4	2
BUTYRIC ACID	1	3	4	1
BUTYRIC ANHYDRIDE	1	3	3	1
BUTYROLACETONE	1	3	3	1
BUTYRYL CHLORIDE	1	1	2	1
CADMIUM CHLORIDE	1	3	3	1
CADMIUM CYANIDE	1	1	1	1
CADMIUM NITRATE	1	2	3	1
CADMIUM OXIDE	1	3	3	1
CADMIUM SULFATE	1	3	3	1
CADMIUM SULFIDE	1	3	3	1
CALCINE LIQUORS	1	1	1	1
CALCIUM ACETATE	1	4	2	1
CALCIUM ARSENATE	1	1	1	1
CALCIUM BENZOATE	1	1	2	1
CALCIUM BICARBONATE	1	2	3	1
CALCIUM BISULFIDE	1	1	3	1
CALCIUM BISULFITE	1	1	1	1
CALCIUM BROMIDE	1	1	1	1
CALCIUM CARBONATE	1	1	1	1
CALCIUM CHLORATE	1	1	3	1
CALCIUM CHLORIDE	1	1	1	1
CALCIUM CHROMATE	1	3	3	1
CALCIUM CYANIDE	1	1	1	1
CALCIUM FLUORIDE	1	1	1	1
CALCIUM GLUCONATE	1	3	3	1
CALCIUM HYDRIDE	1	1	1	1

O-Ring Chemical Compatibility

The following chemical compatibility chart is for reference only. ABB assumes no responsibility for the accuracy of the following information and strongly suggests testing compatibility before use.

1= Excellent 2= Good 3 = Poor 4 = Not Recommended - = No Information	Kalrez	Viton	EPDM	Markez
CALCIUM HYDROGEN SULFITE	1	1	4	1
CALCIUM HYDROSULFIDE	1	3	1	1
CALCIUM HYDROXIDE	1	1	1	1
CALCIUM HYPOCHLORITE	1	1	1	1
CALCIUM HYPOPHOSPHITE	1	3	1	1
CALCIUM LACTATE	1	3	1	1
CALCIUM NITRATE	1	1	1	1
CALCIUM OXALATE	1	3	1	1
CALCIUM OXIDE	1	1	1	1
CALCIUM PHENOLSULFONATE	1	3	1	1
CALCIUM PHOSPHATE	1	1	1	1
CALCIUM PHOSPHATE ACID	1	3	1	1
CALCIUM PROPIONATE	1	3	1	1
CALCIUM SALTS	1	1	1	1
CALCIUM SILICATE	1	1	1	1
CALCIUM STEARATE	1	1	4	1
CALCIUM SULFAMATE	1	1	4	1
CALCIUM SULFATE	1	2	1	1
CALCIUM SULFIDE	1	1	1	1
CALCIUM SULFITE	1	1	1	1
CALCIUM THIOCYANATE	1	3	1	1
CALCIUM THIOSULFATE	1	1	1	1
CALCIUM TUNGSTATE	1	3	1	1
CALICHE LIQUORS	1	1	1	1
CAMPHENE	1	2	4	1
CAMPHOR	1	2	1	1
CAMPHORATED OIL	1	2	4	1
CAMPHORIC ACID	1	2	4	1
CANE SUGAR LIQUORS	1	1	1	1
CAPRIC ACID	1	2	4	1
CAPROIC ACID	1	2	4	1
CAPROIC ALDEHYDE	1	4	2	1
CAPROLACTAM	1	4	1	1
CAPRONALDEHYDE	1	1	4	1
CARBAMATE	1	1	2	1
CARBITOL	1	3	2	1
CARBITOL 2	1	2	2	1
CARBOLIC ACID	1	1	2	1
CARBOLINEUM	1	1	4	1
CARBON BISULFIDE	1	1	4	1
CARBON DIOXIDE	1	1	1	1
CARBON DIOXIDE, DRY	1	1	2	1
CARBON DIOXIDE, WET	1	1	2	1
CARBON DISULFIDE	1	2	4	1
CARBON FLUORIDES	1	1	4	1
CARBON MONOXIDE	1	1	1	1
CARBON MONOXIDE, DRY	1	1	1	1
CARBON MONOXIDE, WET	1	1	1	1
CARBON TETRACHLORIDE	1	1	4	1
CARBON TETRAFLUORIDE	1	1	4	1
CARBONIC ACID	1	1	1	1
CASEIN	1	1	1	1
CASTOR OIL	1	1	2	1
CAUSTIC LIME	1	1	1	1
CAUSTIC POTASH	1	1	1	1
CAUSTIC SODA	1	4	1	1
CELLOSOLVE	1	4	2	1
CELLOSOLVE ACETATE	1	4	2	1

1= Excellent 2= Good 3 = Poor 4 = Not Recommended - = No Information	Kalrez	Viton	EPDM	Markez
CELLOSOLVE BUTYL	4	4	4	4
CELLULOSE ACETATE	1	4	3	1
CELLULOSE ACETATE BUTYRATE	1	3	3	1
CELLULOSE ETHER	1	3	3	1
CELLULOSE NITRATE	1	3	3	1
CELLULOSE TRIPROPIONATE	1	3	3	1
CELLULUBE, PHOSPHATE ESTERS	1	1	4	1
CERIUM SULFATE	1	3	3	1
CEROUS CHLORIDE	1	3	3	1
CEROUS FLUORIDE	1	3	3	1
CEROUS NITRATE	1	3	3	1
CETANE (HEXADECANE)	1	1	1	1
CETYL ALCOHOL	1	1	1	1
CHLORACETIC ACID	1	4	4	1
CHLORAL	1	4	3	1
CHLORAL HYDRATE, AQUEOUS	1	2	4	1
CHLORAMINE	1	4	1	1
CHLORANTHRAQUINONE	1	1	2	1
CHLORDANE	1	1	2	1
CHLORETHANOL	2	4	4	2
CHLOREXTOL	1	1	2	1
CHLORIC ACID	1	2	4	1
CHLORIDE OF LIME, AQUEOUS	1	1	4	1
CHLORINATED NAPHTHALENE	1	2	4	1
CHLORINATED SALT BRINE	1	1	4	1
CHLORINATED SOLVENTS	1	1	4	1
CHLORINATED SOLVENTS, DRY	1	1	4	1
CHLORINATED SOLVENTS, WET	1	1	4	1
CHLORINE	1	1	2	1
CHLORINE DIOXIDE	2	1	4	2
CHLORINE DIOXIDE, 8% CL AS	1	1	4	1
CHLORINE TRIFLUORIDE	2	4	4	2
CHLORINE WATER	1	1	3	1
CHLORINE, DRY GAS	1	1	4	1
CHLORINE, LIQUID	2	2	4	2
CHLORINE, PLASMA	3	-	-	3
CHLORINE, WET	2	2	4	2
CHLORINE, WET GAS	2	2	4	2
CHLORO 1-NITRO ETHANE	1	4	4	1
CHLORO OXYFLUORIDES	2	-	-	2
CHLORO XYLENOLS	1	1	2	1
CHLOROACETALDEHYDE	2	4	3	2
CHLOROACETIC ACID	1	4	4	1
CHLOROACETONE	1	4	4	1
CHLOROAMINO BENZOIC ACID	1	3	3	1
CHLOROANILINE	1	3	4	1
CHLOROBENZALDEHYDE	1	4	3	1
CHLOROBENZENE	1	1	4	1
CHLOROBENZENE CHLORIDE	1	1	2	1
CHLOROBENZENE TRIFLUORIDE	1	1	2	1
CHLOROBENZOCHLORIDE	1	1	2	1
CHLOROBENZOTRIFLUORIDE	1	1	4	1
CHLOROBROMOMETHANE	1	1	4	1
CHLOROBROMOPROPANE	1	1	2	1
CHLOROBUTADIENE	1	1	4	1
CHLOROBUTANE	1	1	1	1
CHLORODODECANE	1	1	4	1
CHLOROETHANE	1	1	1	1

O-Ring Chemical Compatibility

The following chemical compatibility chart is for reference only. ABB assumes no responsibility for the accuracy of the following information and strongly suggests testing compatibility before use.

1= Excellent 2= Good 3 = Poor 4 = Not Recommended - = No Information	Kalrez	Viton	EPDM	Markez
CHLOROETHANE SULFONIC ACID	1	3	1	1
CHLOROETHYLBENZENE	1	1	4	1
CHLOROFORM	1	2	4	1
CHLOROHYDRIN	1	1	1	1
CHLORONAPHTHALENE	1	1	4	1
CHLORONITROBENZENE	1	3	1	1
CHLORONITROETHANE	1	4	4	1
CHLOROPHENOL	1	1	4	1
CHLOROPHENOL, ORTHO	1	2	1	1
CHLOROPHENOL, PARA	1	2	1	1
CHLOROPICRIN	1	1	4	1
CHLOROPRENE	1	1	4	1
CHLOROSULFONIC ACID	1	4	4	1
CHLOROTOLUENE	1	1	4	1
CHLOROTOLUENE SULFONIC ACID	1	3	1	1
CHLOROTOLUIDINE	1	4	4	1
CHLOROTRIFLUOROETHYLENE	2	-	-	2
CHLOROX	1	1	2	1
CHLORSULPHONIC ACID	-	-	4	-
CHOLESTEROL	1	1	4	1
CHROME ALUM	1	1	1	1
CHROME PLATING SOLUTION	1	1	2	1
CHROMIC ACID	1	1	2	1
CHROMIC OXIDE	1	1	2	1
CHROMIUM POTASSIUM SULFATE	1	1	2	1
CINNAMIC ACID	1	1	4	1
CINNAMIC ALCOHOL	1	1	4	1
CINNAMIC ALDEHYDE	1	3	4	1
CIRCO LIGHT PROCESS OIL	1	1	4	1
CITRIC ACID	1	1	1	1
CLOPHEN	-	2	4	-
CLOPHEN-A TYPES	1	1	-	1
CLOROX	1	1	2	1
COAL TAR	1	1	4	1
COBALT CHLORIDE	1	1	1	1
COBALT CHLORIDE, 2N	1	1	1	1
COBALTOUS ACETATE	1	4	1	1
COBALTOUS BROMIDE	1	1	1	1
COBALTOUS CHLORIDE	1	1	1	1
COBALTOUS SULFATE	1	3	1	1
COCONUT FAT	1	1	4	1
COCONUT FATTY ALCOHOL	1	1	2	1
COCONUT OIL	1	1	3	1
COD LIVER OIL	1	1	1	1
CODEINE	1	1	4	1
COFFEE	1	1	1	1
COLICHE LIQUORS	-	-	2	-
CONVELEX 10	1	1	3	1
COOLANOL	1	1	4	1
COPPER ACETATE	1	4	1	1
COPPER AMMONIUM ACETATE	1	3	1	1
COPPER CARBONATE	1	1	1	1
COPPER CHLORIDE	1	1	1	1
COPPER CYANIDE	1	1	1	1
COPPER FLUORIDE	1	1	1	1
COPPER GLUCONATE	1	3	1	1
COPPER NITRATE	1	1	2	1
COPPER OXIDE	1	1	1	1

1= Excellent 2= Good 3 = Poor 4 = Not Recommended - = No Information	Kalrez	Viton	EPDM	Markez
COPPER SALTS	1	1	1	1
COPPER SULFATE	1	1	1	1
COPPER SULFATE 10%	1	1	1	1
COPPER SULFATE 50%	1	1	1	1
CORN OIL	1	1	1	1
COTTONSEED OIL	1	1	1	1
CREOSOTE, COAL TAR	1	1	1	1
CREOSOTE, WOOD	1	1	1	1
CREOSYLIC ACID	1	1	4	1
CRESOL	1	1	4	1
CRESYLIC ACID	1	1	4	1
CROTONALDEHYDE	1	4	2	1
CROTONIC ACID	1	2	4	1
CRUDE OIL, ASPHALT BASE	1	1	2	1
CUMALDEHYDE	1	1	2	1
CUMENE	1	1	4	1
CUPRIC SULFATE	1	1	1	1
CUTTING OIL	1	1	1	1
CYANOGEN CHLORIDE	1	2	4	1
CYCLOHEXANE	1	1	1	1
CYCLOHEXANOL	1	1	1	1
CYCLOHEXANONE	1	4	4	1
CYCLOHEXENE	1	3	2	1
CYCLOHEXYLAMINE	1	4	4	1
CYCLOHEXYLAMINE LAURATE	1	1	1	1
CYCLOPENTADIENE	1	3	2	1
CYCLOPENTANE	1	1	1	1
CYCLOPOLYOLEFINS	1	3	1	1
CYMENE	1	1	4	1
"DDT (Dichlorodiphenyltrichloroethane)"	1	1	4	1
DECAHYDRONAPHTHALENE	1	1	4	1
DECALIN	1	1	4	1
DECANE	1	1	1	1
DEIONIZED WATER	1	1	2	1
DENATURED ALCOHOL	1	1	1	1
DESMODUR	-	-	-	-
DETERGENT SOLUTIONS	1	1	1	1
DETERGENTS	2	2	1	2
DEVELOPING FLUIDS	1	1	1	1
DEXRON	1	1	1	1
DEXTRIN	1	1	1	1
DEXTRO LACTIC ACID	1	3	3	1
DEXTRON	1	1	1	1
DEXTROSE	1	1	3	1
DIACETONE	1	4	4	1
DIACETONE ALCOHOL	1	4	4	1
DIALKYL SULFATES	1	3	3	1
DIAMYLAMINE	1	4	1	1
DIAZINON	1	2	3	1
DIBENZYL	1	2	2	1
DIBENZYL ETHER	1	4	4	1
DIBENZYL SEBACATE	1	2	4	1
DIBROMODIFLUOROMETHANE	1	-	4	1
DIBROMOETHANE	1	1	2	1
DIBROMOETHYLBENZENE	1	2	4	1
DIBROMOTETRAFLUOROETHANE	2	2	2	2
DIBUTYL CELLOSOLVE ADIPATE	1	3	3	1

O-Ring Chemical Compatibility

The following chemical compatibility chart is for reference only. ABB assumes no responsibility for the accuracy of the following information and strongly suggests testing compatibility before use.

1= Excellent 2= Good 3 = Poor 4 = Not Recommended - = No Information	Kalrez	Viton	EPDM	Markez
DIBUTYL ETHER	1	3	3	1
"DIBUTYL METHYLENEDITHIO GLYCOLATE"	1	1	4	1
DIBUTYL PHTHALATE	1	3	2	1
DIBUTYL SEBACATE	1	4	2	1
DIBUTYL THIOGLYCOLATE	1	1	4	1
DIBUTYL THIOUREA	1	1	4	1
DIBUTYLAMINE	1	4	4	1
DICAPRYL PHTHALATE	1	2	2	1
DICHLOROBUTANE	1	1	4	1
DICHLORACETIC ACID	2	4	1	2
DICHLORETHANE	2	2	4	2
DICHLORETHYLENE	2	2	-	2
DICHLOROACETIC ACID	1	1	4	1
DICHLOROANILINE	1	4	1	1
DICHLOROBENZENE	1	1	4	1
DICHLOROBUTANE	1	1	4	1
DICHLOROBUTENE	1	2	4	1
DICHLORODIETHYL SULFIDE	1	-	1	1
"DICHLORODIPHENYLDICHLOROETHANE"	1	1	4	1
DICHLOROETHANE	1	1	4	1
DICHLOROETHYLENE	1	2	4	1
DICHLOROHYDRIN	1	3	1	1
DICHLOROISOPROPYL ETHER	1	3	3	1
DICHLROMETHANE	1	3	4	1
DICHLOROPHENOL	1	2	4	1
DICHLOROPHENOXYACETIC ACID	1	1	4	1
DICHLOROPROPANE	1	1	4	1
DICHLOROPROPENE	1	2	4	1
DICYCLOHEXYLAMINE	1	4	4	1
DICYCLOHEXYLAMMONIUM NITRATE	1	3	1	1
DIELDRIN	1	4	4	1
DIESEL FUEL	1	1	4	1
DIESEL OIL	1	1	4	1
DI-ESTER SYNTHETIC LUBRICANTS	1	1	4	1
DIETHANOLAMINE	1	3	1	1
DIETHYL CARBONATE	1	1	1	1
DIETHYL ETHER	1	4	4	1
DIETHYL PHTHALATE	1	1	4	1
DIETHYL SEBACATE	1	2	2	1
DIETHYL SULFATE	1	3	1	1
DIETHYLAMINE	1	4	2	1
DIETHYLANILINE	1	3	1	1
DIETHYLBENZENE	1	1	4	1
DIETHYLENE GLYCOL	1	1	1	1
DIETHYLENE GLYCOL BUTYL ETHER	1	3	1	1
DIETHYLHEXYL PHTHALATE	1	2	2	1
DIETHYLHEXYL SEBACATE	1	1	2	1
DIFLUORODIBROMOMETHANE	1	-	2	1
DIFLUOROETHANE	1	4	4	1
DIFLUOROMONOCHLOROETHANE	1	1	4	1
DIGLYCOL CHLOROFORMATE	1	3	1	1
DIGLYCOLIC ACID	1	1	1	1
DIHEXYL PHTHALATE	2	4	-	2
DIHYDROXYDIPHENYLSULFONE	1	3	1	1
DIISOBUTYL KETONE	1	4	1	1
DIISOBUTYLCARBINOL	1	1	4	1

1= Excellent 2= Good 3 = Poor 4 = Not Recommended - = No Information	Kalrez	Viton	EPDM	Markez
DIISOBUTYLENE	1	1	2	1
DIISOOCTYL SEBACATE	1	2	3	1
DIISOPROPYL ETHER	1	1	-	1
DIISOPROPYL KETONE	1	4	4	1
DIISOPROPYLBENZENE	1	1	4	1
DIISOPROPYLIDENE ACETONE	1	4	4	1
DIMETHYL ACETAMIDE	1	4	3	1
DIMETHYL ANILINE	1	4	2	1
DIMETHYL DISULFIDE	1	1	1	1
DIMETHYL ETHER	1	4	4	1
DIMETHYL FORMALDEHYDE	1	4	3	1
DIMETHYL FORMAMIDE	1	4	3	1
DIMETHYL HYDRAZINE	1	4	3	1
DIMETHYL PHENYL CARBINOL	1	1	2	1
DIMETHYL PHENYL METHANOL	1	1	2	1
DIMETHYL PHTHALATE	1	2	4	1
DIMETHYL SULFOXIDE	1	4	3	1
DIMETHYL TEREPHTHALATE	1	2	2	1
DIMETHYLAMINE	2	4	4	2
DIMETHYLANILINE	1	4	3	1
DIMETHYLETHER	1	4	4	1
DINITROCHLOROBENZENE	1	1	2	1
DINITROGEN TETROXIDE	2	-	-	2
DINITROTOLUENE	1	4	4	1
DINONYL PHTHALATE	2	4	4	2
DIOCTYL PHTHALATE	1	1	4	1
DIOCTYL SEBACATE	1	1	4	1
DI-OCTYLAMINE	1	1	1	1
DIOXANE	1	4	4	1
DIOXOLANE	1	4	4	1
DIPENTENE	1	1	2	1
DIPHENYL	1	1	4	1
DIPHENYL OXIDES	1	1	4	1
DIPHENYLAMINE	1	4	2	1
DIPHENYLPROPANE	1	2	2	1
DISILANE	1	-	-	1
DODECYLBENZENE	1	1	2	1
DRINKING WATER	1	1	1	1
DRY CLEANING FLUIDS	2	1	3	2
DTE 20 SERIES	1	1	2	1
DTE LIGHT OIL	1	1	1	1
ELCO 28-EP LUBRICANT	1	1	1	1
ENGINE OILS	1	1	1	1
EPICHLOROHYDRIN	1	4	4	1
EPOXY RESINS	1	4	3	1
ESAM-6 FLUID	1	4	4	1
ESSENTIAL OILS	1	2	4	1
ETHANAL	2	4	4	2
ETHANE	1	1	1	1
ETHANETHIOL	1	2	4	1
ETHANOL	1	3	3	1
ETHANOLAMINE	1	4	4	1
ETHERS	1	4	4	1
ETHOXYETHYL ACETATE	1	3	3	1
ETHYL ACETATE	1	4	4	1
ETHYL ACETOACETATE	1	4	4	1
ETHYL ACRYLATE	1	4	4	1
ETHYL ALCOHOL	1	2	1	1

O-Ring Chemical Compatibility

The following chemical compatibility chart is for reference only. ABB assumes no responsibility for the accuracy of the following information and strongly suggests testing compatibility before use.

1= Excellent 2= Good 3 = Poor 4 = Not Recommended - = No Information	Kalrez	Viton	EPDM	Markez
ETHYL BENZENE	1	1	4	1
ETHYL BENZOATE	1	1	4	1
ETHYL BROMIDE	1	1	4	1
ETHYL CELLOSOLVE	1	4	2	1
ETHYL CELLULOSE	1	4	2	1
ETHYL CHLORIDE	1	1	2	1
ETHYL CHLOROCARBONATE	1	1	4	1
ETHYL CHLOROFORMATE	1	4	2	1
ETHYL CYANIDE	1	4	4	1
ETHYL CYCLOPENTANE	1	1	4	1
ETHYL DIBROMIDE	1	1	3	1
ETHYL DICHLORIDE	1	1	3	1
ETHYL ETHER	1	4	3	1
ETHYL FORMATE	2	1	2	2
ETHYL HEXANOL	1	1	1	1
ETHYL LACTATE	1	3	1	1
ETHYL MERCAPTAN	1	2	-	1
ETHYL NITRITE	1	3	1	1
ETHYL OXALATE	1	1	1	1
ETHYL PENTACHLOROBENZENE	1	1	4	1
ETHYL PYRIDINE	1	1	4	1
ETHYL SILICATE	1	1	1	1
ETHYL STEARATE	1	1	4	1
ETHYL SULFATE	1	4	1	1
ETHYL T-BUTYL ETHER	1	1	3	1
ETHYL VALERATE	1	1	4	1
ETHYLACRYLIC ACID	-	-	2	-
ETHYLAMINE	1	4	1	1
ETHYLENE	1	1	2	1
ETHYLENE CHLORIDE	1	2	4	1
ETHYLENE CHLOROHYDRIN	1	1	2	1
ETHYLENE CYANOHYDRIN	1	1	4	1
ETHYLENE DIAMINE	2	4	1	2
ETHYLENE DIBROMIDE	1	2	3	1
ETHYLENE DICHLORIDE	1	1	3	1
ETHYLENE GLYCOL	1	1	1	1
ETHYLENE GLYCOL BUTYL ETHER ACETATE	1	4	2	1
"ETHYLENE GLYCOL ETHYL ETHER ACETATE"	1	4	2	1
ETHYLENE HYDROCHLORIDE	1	1	3	1
ETHYLENE OXIDE	1	4	3	1
"ETHYLENE OXIDE, 12% AND FREON 12, 80%"	4	4	2	4
ETHYLENE TRICHLORIDE	1	1	3	1
ETHYLENEDIAMINE	2	4	1	2
ETHYLMORPHOLINE	1	1	4	1
"ETHYLMORPHOLINESTANNOUS OCTOTATE"	1	4	2	1
ETHYLSULFURIC ACID	1	3	1	1
FATTY ACIDS	1	1	3	1
FATTY ALCOHOL	1	1	2	1
FERMENTATION GAS	1	1	-	1
FERRIC ACETATE	1	4	1	1
FERRIC AMMONIUM SULFATE	1	3	1	1
FERRIC CHLORIDE	1	1	1	1
FERRIC FERROCYANIDE	1	3	1	1
FERRIC HYDROXIDE	1	1	1	1

1= Excellent 2= Good 3 = Poor 4 = Not Recommended - = No Information	Kalrez	Viton	EPDM	Markez
FERRIC NITRATE	1	1	1	1
FERRIC PERSULFATE	1	1	1	1
FERRIC SULFATE	1	1	1	1
FERROUS AMMONIUM CITRATE	1	3	3	1
FERROUS AMMONIUM SULFATE	1	2	3	1
FERROUS CARBONATE	1	3	3	1
FERROUS IODIDE	1	3	3	1
FERROUS SULFATE	1	1	3	1
FERROUS TARTRATE	1	3	3	1
FISH OIL	1	1	1	1
FLUORINATED CYCLIC ETHERS	1	-	-	1
FLUORINE GAS	2	2	4	2
FLUORINE LIQUID	2	2	4	2
FLUOROBENZENE	1	1	4	1
FLUOROBORIC ACID	1	-	1	1
FLUOROCARBON OILS	2	-	-	2
FLUOROLUBE	2	2	1	2
FLUOROSILICIC ACID	1	1	1	1
FOMBLIN	1	1	-	1
FORMALDEHYDE	1	4	2	1
FORMAMIDE	1	3	3	1
FORMIC ACID	2	4	2	2
FRUIT JUICE	1	1	2	1
FUEL OIL	1	1	1	1
FUEL OIL NO. 6	1	1	2	1
FUEL OIL, 1 AND 2	1	1	1	1
FUEL OIL, ACIDIC	1	1	1	1
FUMARIC ACID	1	1	1	1
FURALDEHYDE	2	4	4	2
FURAN	1	4	4	1
FURANE	2	4	-	2
FURFURAL	2	4	4	2
FURFURYL ALCOHOL	1	2	4	1
FURNACE GAS, DRY	1	1	4	1
FURYL CARBINOL	1	4	4	1
GALDEN	4	1	-	4
GALLIC ACID	1	1	2	1
GAS LIQUOR	1	1	1	1
GAS OIL	1	1	1	1
GASOHOL	1	-	4	1
GASOLINE	1	1	1	1
GELATIN	1	1	1	1
GLAUBER'S SALT	1	1	4	1
GLUCONIC ACID	1	3	3	1
GLUCOSE	1	1	1	1
GLUTAMIC ACID	1	3	3	1
GLYCERIN	1	1	1	1
GLYCEROL CHLOROHYDRIN	2	-	4	2
GLYCEROL DICHLOROHYDRIN	1	3	3	1
GLYCEROL MONOCHLOROHYDRIN	1	3	3	1
GLYCEROL TRIACETATE	1	3	3	1
GLYCEROPHOSPHORIC ACID	1	3	3	1
GLYCERYL PHOSPHATE	1	3	3	1
GLYCIDOL	1	3	3	1
GLYCINE, AQUEOUS, 10%	1	1	2	1
GLYCOL MONOETHER	1	-	-	1
GLYCOLIC ACID	1	1	1	1
GLYCOLS	1	1	1	1

O-Ring Chemical Compatibility

The following chemical compatibility chart is for reference only. ABB assumes no responsibility for the accuracy of the following information and strongly suggests testing compatibility before use.

1= Excellent 2= Good 3 = Poor 4 = Not Recommended - = No Information	Kalrez	Viton	EPDM	Markez
GLYCOXYLIC ACID	1	3	1	1
GREASE, PETROLEUM BASE	1	1	4	1
GREEN SULFATE LIQUOR	1	1	1	1
HALOTHANE	2	1	4	2
HALOWAX OIL	2	1	4	2
HEATING OIL, MINERAL-OIL BASED	1	1	4	1
HEAVY WATER	1	2	1	1
HELIUM	1	1	1	1
HEPTACHLOR	1	2	4	1
HEPTACHLOROBUTENE	1	1	4	1
HEPTALDEHYDE	1	4	4	1
HEPTANE	1	1	4	1
HEPTANOIC ACID	1	1	4	1
HEXACHLOROACETONE	1	4	1	1
HEXACHLOROBUTADIENE	1	1	4	1
HEXACHLOROBUTENE	1	1	4	1
HEXACHLOROCYCLOHEXANE	1	1	-	1
HEXACHLOROETHANE	1	2	4	1
HEXADECANE	1	1	4	1
HEXAFLUOROETHANE	2	2	1	2
HEXALDEHYDE	1	4	1	1
HEXAMETHYLENE	1	1	4	1
"HEXAMETHYLENE DIAMMONIUM ADIPATE"	1	1	4	1
HEXAMETHYLENEDIAMINE	2	4	1	2
HEXAMETHYLENETETRAMINE	2	4	1	2
HEXANE	1	1	4	1
HEXANE TRIOL	1	1	1	1
HEXENE-1	1	1	4	1
HEXONE	1	4	1	1
HEXYL ACETATE	1	4	4	1
HEXYL ALCOHOL	1	1	3	1
HEXYLENE GLYCOL	1	1	1	1
HEXYLRESORCINOL	1	2	4	1
HYDRAULIC OIL, PETROLEUM	1	1	4	1
HYDRAULIC OILS, SYNTHETIC BASE	1	3	4	1
HYDRAZINE	2	4	1	2
HYDRAZINE DIHYDROCHLORIDE	1	4	1	1
HYDRAZINE HYDRATE	1	4	1	1
HYDRAZINE, ANHYDROUS	1	4	2	1
HYDRIODIC ACID	1	1	4	1
HYDROBROMIC ACID	1	1	1	1
HYDROBROMIC ACID, 40%	1	1	1	1
HYDROBROMIC ACID, GAS	-	1	1	-
HYDROCARBONS, SATURATED	1	1	4	1
HYDROCHLORIC ACID	1	1	1	1
HYDROCYANIC ACID	1	1	1	1
HYDROFLUORIC ACID	1	1	4	1
HYDROFLUORIC ACID, ANHYDROUS	1	4	3	1
HYDROFLUORIC ACID, CONCENTRATED COLD	2	-	2	2
"HYDROFLUORIC ACID, CONCENTRATED HOT"	1	4	4	1
HYDROFLUOROSILICIC ACID	1	1	1	1
HYDROGEN BROMIDE	1	1	1	1
HYDROGEN CHLORIDE, ANHYDROUS	1	1	1	1
HYDROGEN CHLORIDE, GAS	1	1	1	1
HYDROGEN CYANIDE	1	2	1	1

1= Excellent 2= Good 3 = Poor 4 = Not Recommended - = No Information	Kalrez	Viton	EPDM	Markez
HYDROGEN FLUORIDE	1	4	4	1
HYDROGEN FLUORIDE, ANHYDROUS	2	4	4	2
HYDROGEN GAS	1	1	1	1
HYDROGEN GAS, HOT	1	1	1	1
HYDROGEN PEROXIDE	1	1	2	1
HYDROGEN PEROXIDE, 90%	1	2	4	1
HYDROGEN SULFIDE, DRY COLD	1	4	1	1
HYDROGEN SULFIDE, DRY HOT	1	4	1	1
HYDROGEN SULFIDE, WET COLD	1	4	1	1
HYDROGEN SULFIDE, WET HOT	1	4	1	1
HYDROQUINOL	2	1	4	2
HYDROQUINONE	2	2	3	2
HYDROSULPHITE, AQUEOUS	2	-	2	2
HYDROXYACETIC ACID	1	3	3	1
HYDROXYCITRONELLAL	1	1	-	1
HYDROXYLAMINE SULFATE	2	-	1	2
HYPOCHLOROUS ACID	1	1	4	1
INDOLE	1	1	-	1
INK	1	2	1	1
INSULIN	1	3	3	1
IODIC ACID	1	3	3	1
IODINE	1	1	2	1
IODINE PENTAFLUORIDE	2	4	4	2
IODINE, TINCTURE	1	1	1	1
ODOFORM	1	3	-	1
IRON(III) CHLORIDE	1	1	1	1
ISOAMYL ACETATE	1	4	3	1
ISOAMYL BUTYRATE	1	4	3	1
ISOAMYL VALERATE	1	1	3	1
ISOBOREOL	1	1	-	1
ISOBUTANE	1	1	1	1
ISOBUTANOL	1	1	2	1
ISOBUTYL ACETATE	1	4	3	1
ISOBUTYL ALCOHOL	1	1	2	1
ISOBUTYL CHLORIDE	1	2	4	1
ISOBUTYL ETHER	1	4	2	1
ISOBUTYL METHYL KETONE	1	4	3	1
ISOBUTYL N-BUTYRATE	1	1	4	1
ISOBUTYL PHOSPHATE	1	3	3	1
ISOBUTYLENE	1	1	-	1
ISOBUTYRALDEHYDE	2	4	3	2
ISOBUTYRIC ACID	1	3	2	1
ISOCROTYL CHLORIDE	1	1	-	1
ISODECANOL	1	2	1	1
ISODODECANE	1	1	1	1
ISOEUGENOL	1	2	1	1
ISOCTANE	1	1	1	1
ISOPENTANE	1	1	1	1
ISOPHORONE	1	4	4	1
ISOPROPANOL	1	1	2	1
ISOPROPYL ACETATE	1	4	4	1
ISOPROPYL CHLORIDE	1	1	4	1
ISOPROPYL ETHER	1	4	2	1
ISOPROPYLACETONE	1	3	3	1
ISOPROPYLAMINE	1	3	3	1
KEROSENE	1	1	1	1
LACQUER SOLVENTS	1	4	4	1
LACQUERS	1	4	4	1

O-Ring Chemical Compatibility

The following chemical compatibility chart is for reference only. ABB assumes no responsibility for the accuracy of the following information and strongly suggests testing compatibility before use.

1= Excellent 2= Good 3 = Poor 4 = Not Recommended - = No Information	Kalrez	Viton	EPDM	Markez
LACTAMS	1	2	2	1
LACTIC ACID, COLD	1	1	1	1
LACTIC ACID, HOT	1	1	4	1
LACTONES	4	4	2	4
LARD	1	1	2	1
LAURIC ACID	1	1	4	1
LAURYL ALCOHOL	1	1	2	1
LAVENDER OIL	1	1	4	1
LEAD ACETATE	1	4	1	1
LEAD ARSENATE	1	3	1	1
LEAD BROMIDE	1	3	1	1
LEAD CARBONATE	1	3	1	1
LEAD CHLORIDE	1	1	1	1
LEAD CHROMATE	1	3	1	1
LEAD DIOXIDE	1	2	1	1
LEAD LINOLEATE	1	3	1	1
LEAD NITRATE	1	1	1	1
LEAD OXIDE	1	2	1	1
LEAD SULFAMATE	1	1	1	1
LEMON JUICE, UNDILUTED	1	-	-	1
LIGHT GREASE	1	1	4	1
LIGROIN	1	1	4	1
LIME BLEACH	1	1	1	1
LIME SULFUR	1	1	1	1
LINDOL HYDRAULIC FLUID,	1	2	1	1
PHOSPHATE ESTER TYPE LINOLEIC ACID	1	2	4	1
LINSEED OIL	1	1	3	1
LIQUEFIED PETROLEUM GAS	1	1	4	1
LIQUID OXYGEN	2	4	4	2
LIQUIMOLY	1	1	4	1
LIQUOR	1	1	1	1
LITHIUM BROMIDE	1	2	1	1
LITHIUM CARBONATE	1	3	1	1
LITHIUM CHLORIDE	1	1	1	1
LITHIUM CITRATE	1	3	1	1
LITHIUM HYDROXIDE	1	3	1	1
LITHIUM HYPOCHLORITE	1	3	1	1
LITHIUM NITRATE	1	3	1	1
LITHIUM NITRITE	1	3	1	1
LITHIUM PERCHLORATE	1	3	1	1
LITHIUM SALICYLATE	1	3	1	1
LITHOPONE	1	3	1	1
LUBRICATING OILS, PETROLEUM	1	1	4	1
LUBRICATING OILS, SYNTHETIC	1	1	-	1
LYE	1	2	1	1
MACHINE OIL, MINERAL	1	1	4	1
MAGNESIUM CHLORIDE	1	1	1	1
MAGNESIUM HYDROXIDE	1	1	1	1
MAGNESIUM SALTS	1	1	1	1
MAGNESIUM SULFATE	1	1	1	1
MAGNESIUM SULFITE	1	2	1	1
MAIZE OIL	1	1	4	1
MALATHION	1	2	4	1
MALEIC ACID	1	1	4	1
MALEIC ANHYDRIDE	1	4	4	1
MALEIC HYDRAZIDE	1	3	1	1
MALIC ACID	1	1	4	1

1= Excellent 2= Good 3 = Poor 4 = Not Recommended - = No Information	Kalrez	Viton	EPDM	Markez
MANDELIC ACID	1	4	3	1
MANGANESE ACETATE	1	4	3	1
MANGANESE CARBONATE	1	2	3	1
MANGANESE CHLORIDE	1	3	3	1
MANGANESE DIOXIDE	1	3	3	1
MANGANESE GLUCONATE	1	3	3	1
MANGANESE HYPOPHOSPHITE	1	3	3	1
MANGANESE LINOLEATE	1	3	3	1
MANGANESE PHOSPHATE	1	3	3	1
MANGANESE SULFATE	1	1	3	1
MANGANOUS CHLORIDE	1	3	3	1
MANGANOUS PHOSPHATE	1	3	3	1
MANGANOUS SULFATE	1	3	3	1
MANNITOL	1	3	3	1
MARGARINE	1	1	1	1
MENTHOL	1	2	4	1
MERCAPTAN	1	3	1	1
MERCAPTOBENZOTHAZOLE	1	1	3	1
MERCURIC ACETATE	1	4	3	1
MERCURIC CHLORIDE	1	1	1	1
MERCURIC CYANIDE	1	2	3	1
MERCURIC IODIDE	1	3	3	1
MERCURIC NITRATE	1	3	3	1
MERCURIC SULFATE	1	2	3	1
MERCURIC SULFITE	1	3	3	1
MERCURIOS NITRATE, HYDRATED	1	2	3	1
MERCURY	1	1	1	1
MERCURY CHLORIDE	1	3	3	1
MERCURY FULMINATE	1	3	3	1
MERCURY SALTS	1	1	1	1
MERCURY VAPOR	1	1	1	1
MESITYL OXIDE	1	4	4	1
METALDEHYDE	1	4	3	1
METHACRYLIC ACID	1	3	3	1
METHALLYL CHLORIDE	1	1	-	1
METHANE	1	1	1	1
METHANOL	1	4	1	1
METHOXY BUTANOL	1	1	1	1
METHOXYETHANOL	1	3	3	1
METHYL 2-PYRROLIDONE	1	2	-	1
METHYL ABETATE	1	2	-	1
METHYL ACETATE	1	4	4	1
METHYL ACETOACETATE	1	4	4	1
METHYL ACETOPHENONE	1	4	-	1
METHYL ACRYLATE	1	4	4	1
METHYL ACRYLIC ACID	1	3	4	1
METHYL AMYLKETONE	1	4	3	1
METHYL ANTHRANILATE	1	2	-	1
METHYL BENZOATE	1	1	4	1
METHYL BROMIDE	1	1	2	1
METHYL BUTANETHIOL	1	1	4	1
METHYL BUTANOL	1	1	2	1
METHYL BUTYL KETONE	1	4	4	1
METHYL BUTYRATE CELLOSOLVE	1	3	3	1
METHYL BUTYRATE CHLORIDE	1	3	3	1
METHYL CARBONATE	1	1	4	1
METHYL CELLOSOLVE	1	4	3	1
METHYL CELLULOSE	1	4	2	1

O-Ring Chemical Compatibility

The following chemical compatibility chart is for reference only. ABB assumes no responsibility for the accuracy of the following information and strongly suggests testing compatibility before use.

1= Excellent 2= Good 3 = Poor 4 = Not Recommended - = No Information	Kalrez	Viton	EPDM	Markez
METHYL CHLORIDE	1	2	3	1
METHYL CHLOROACETATE	1	4	1	1
METHYL CHLOROFORM	1	2	4	1
METHYL CHLOROFORMATE	1	2	4	1
METHYL CYANIDE	1	2	1	1
METHYL CYCLOHEXANONE	1	4	4	1
METHYL DICHLORIDE	1	1	-	1
METHYL ETHER	1	4	2	1
METHYL ETHYL KETONE	1	4	1	1
METHYL ETHYL KETONE PEROXIDE	1	4	4	1
METHYL ETHYL OLEATE	1	1	-	1
METHYL FORMATE	1	4	2	1
METHYL HEXYL KETONE	1	4	1	1
METHYL IODIDE	1	1	4	1
METHYL ISOBUTYL KETONE	1	4	3	1
METHYL ISOCYANATE	1	4	1	1
METHYL ISOPROPYL KETONE	1	4	2	1
METHYL ISOVALERATE	1	1	-	1
METHYL LACTATE	1	3	1	1
METHYL MERCAPTAN	1	3	1	1
METHYL METHACRYLATE	1	4	4	1
METHYL OLEATE	1	2	2	1
METHYL PENTADIENE	1	1	-	1
METHYL PHENYLACETATE	1	4	-	1
METHYL PROPYL SALICYLATE	-	2	2	-
METHYL SALICYLATE	1	2	2	1
METHYL T-BUTYL ETHER	1	4	3	1
METHYL VALERATE	1	1	-	1
METHYLAMINE	1	4	1	1
METHYLAMYL ACETATE	1	3	1	1
METHYLCYCLOPENTANE	1	1	4	1
METHYLENE BROMIDE	1	3	4	1
METHYLENE CHLORIDE	1	3	4	1
"METHYLENE DI-P-PHENYLENE ISOCYANATE"	1	3	1	1
METHYLENE IODIDE	1	1	-	1
METHYLGLYCEROL	1	3	1	1
METHYLISOBUTYL CARBINOL	1	1	4	1
METHYLPYRROLIDINE	1	1	-	1
METHYLPYRROLIDONE	1	1	-	1
METHYLSULFURIC ACID	1	3	1	1
MILK	1	1	1	1
MILK OF LIME	1	1	-	1
MINERAL OILS	1	1	3	1
MINERAL WATER	1	1	1	1
MIXED ACID ETCHANTS	1	3	4	1
MIXED ACIDS	1	3	1	1
MOBILUX	1	1	4	1
MOLASSES	1	1	2	1
MOLYBDENUM DISULFIDE GREASE	1	2	4	1
MOLYBDENUM OXIDE	1	3	1	1
MOLYBDENUM TRIOXIDE	1	3	1	1
MOLYBDIC ACID	1	3	1	1
MONOBROMOBENZENE	1	2	4	1
MONOBROMOTOLUENE	1	1	-	1
MONOCHLORACETIC ACID	2	-	1	2
MONOCHLORACETIC ACID, ETHYL ESTER	1	2	2	1

1= Excellent 2= Good 3 = Poor 4 = Not Recommended - = No Information	Kalrez	Viton	EPDM	Markez
"MONOCHLORACETIC ACID, METHYL ESTER"	1	2	4	1
MONOCHLOROACETIC ACID	1	4	3	1
MONOCHLOROBENZENE	1	2	4	1
MONOCHLOROBUTENE	1	1	-	1
MONOETHANOLAMINE	1	4	4	1
MONOETHYL AMINE	1	3	3	1
MONOISOPROPYLAMINE	1	3	3	1
MONOMETHYL ANILINE	1	2	4	1
MONOMETHYL ETHER	1	1	-	1
MONOMETHYL HYDRAZINE	2	4	2	2
MONOMETHYLAMINE	1	3	3	1
MONOMETHYLANILINE	1	3	4	1
MONONITROTOLUENE	1	3	3	1
"MONONITROTOLUENE, 40% & DINI-TROTOLUENE, 60%"	2	3	4	2
MONOVINYL ACETATE	-	-	4	-
MONOVINYL ACETYLENE	1	1	1	1
MOPAR BRAKE FLUID	1	4	3	1
MORPHOLINE	1	1	4	1
MOTOR OILS	1	1	1	1
MYRISTIC ACID	1	1	-	1
MYRISTYL ALCOHOL	1	1	1	1
NAFTOLEN ZD	1	1	2	1
NAPHTHA	1	1	2	1
NAPHTHALENE	1	1	4	1
NAPHTHALENE CHLORIDE	1	1	-	1
NAPHTHALENE SULFONIC ACID	1	1	-	1
NAPHTHALENIC	1	1	2	1
NAPHTHALENIC ACID	1	1	-	1
NAPHTHALONIC ACID	1	1	-	1
NAPHTHENIC ACID	1	1	2	1
NAPHTHOIC ACID	1	1	2	1
NAPTHA	1	1	2	1
NATURAL GAS	1	1	1	1
NEATSFOOT OIL	1	1	1	1
NEON	1	1	1	1
NEVILLE ACID	1	1	4	1
NEVILLE-WINTER ACID	1	1	4	1
NICKEL ACETATE	1	4	2	1
NICKEL AMMONIUM SULFATE	1	2	1	1
NICKEL CHLORIDE	1	1	1	1
NICKEL CYANIDE	1	3	3	1
NICKEL NITRATE	1	1	3	1
NICKEL SALTS	1	1	1	1
NICKEL SULFATE	1	1	1	1
NICOTINAMIDE	1	1	-	1
NICOTINAMIDE HYDROCHLORIDE	1	3	3	1
NICOTINE	1	2	-	1
NICOTINE SULFATE	1	3	3	1
NITER CAKE	1	1	1	1
NITRIC ACID, 0 - 50%	1	1	4	1
NITRIC ACID, 50 - 100%	1	2	4	1
NITRIC ACID, CONCENTRATED	1	4	4	1
NITRIC ACID, RED FUMING	1	3	4	1
NITRIC ACID, WHITE FUMING	2	4	4	2
NITROANILINE	1	3	3	1
NITROANILINE, META	1	3	3	1

O-Ring Chemical Compatibility

The following chemical compatibility chart is for reference only. ABB assumes no responsibility for the accuracy of the following information and strongly suggests testing compatibility before use.

1= Excellent 2= Good 3 = Poor 4 = Not Recommended - = No Information	Kalrez	Viton	EPDM	Markez
NITROBENZENE	1	3	4	1
NITROBENZOIC ACID	1	3	1	1
NITROCELLULOSE	1	3	1	1
NITROCHLOROBENZENE	1	3	1	1
NITROCHLOROFORM	1	3	1	1
NITRODIETHYLANILINE	1	3	1	1
NITROETHANE	1	4	2	1
NITROFLUOROBENZENE	1	3	1	1
NITROGEN	1	1	1	1
NITROGEN DIOXIDE	1	4	-	1
NITROGEN OXIDES	1	4	1	1
NITROGEN TETROXIDE	2	4	4	2
NITROGEN TRIFLUORIDE	1	-	-	1
NITROGLYCERINE	1	1	1	1
NITROGLYCOL	1	1	1	1
NITROGLYCEROL	1	3	1	1
NITROISOPROPYLBENZENE	1	3	1	1
NITROMETHANE	1	4	2	1
NITROPHENOL	1	4	1	1
NITROPROPANE	1	4	2	1
NITROTHIOPHENE	1	3	1	1
NITROTOLUENE	1	3	1	1
NITROTOLUENE, ORTHO	1	3	4	1
NITROUS ACID	1	3	1	1
NITROUS GASES	1	1	1	1
NITROUS OXIDE	1	1	1	1
NONANE	1	1	4	1
OCTACHLOROTOLUENE	1	1	4	1
OCTADECANE	1	1	4	1
OCTAFLUOROCYCLOBUTANE	2	2	1	2
OCTANAL	1	4	4	1
OCTANE	1	1	4	1
OCTYL ACETATE	1	4	1	1
OCTYL ALCOHOL	1	1	1	1
OCTYL CHLORIDE	1	2	4	1
OCTYL CRESOL	2	2	4	2
OCTYL PHTHALATE	1	3	-	1
OIL OF TURPENTINE	1	1	4	1
OLEFINS	1	1	-	1
OLEIC ACID	1	2	4	1
OLEUM	1	2	4	1
OLEUM SPIRITS	1	1	4	1
OLEYL ALCOHOL	1	1	1	1
OLIVE OIL	1	1	2	1
ORONITE 8200	1	1	4	1
ORONITE 8515	1	1	4	1
ORTHOCHLOROETHYL BENZENE	1	2	4	1
OXALIC ACID	1	1	1	1
OXYGEN, COLD	1	1	1	1
OXYGEN, HOT	1	2	4	1
OXYGEN, LIQUID	2	4	4	2
OZONATED DEIONIZED WATER	1	3	2	1
OZONE	1	1	1	1
PAINT THINNER	1	3	4	1
PALM KERNEL FATTY ACID	1	1	4	1
PALMITIC ACID	1	1	2	1
PARAFFIN EMULSIONS	1	1	4	1
PARAFFIN OIL	1	1	4	1

1= Excellent 2= Good 3 = Poor 4 = Not Recommended - = No Information	Kalrez	Viton	EPDM	Markez
PARAFFINS	1	1	1	1
PARALDEHYDE	1	4	3	1
PAR-AL-KETONE	2	4	4	2
PARATHION	1	1	-	1
PEANUT OIL	1	1	1	1
PECTIN	1	1	1	1
PENICILLIN	1	1	-	1
PENTACHLORODIPHENYL	-	-	4	-
PENTACHLOROETHANE	1	2	-	1
PENTACHLOROPHENOL	1	2	3	1
PENTAERYTHRITOL	1	1	1	1
PENTAERYTHRITOL TETRANITRATE	1	3	3	1
PENTAFLUROETHANE	2	-	-	2
PENTANE	1	1	1	1
PENTYL PENTANOATE	1	1	1	1
PERACETIC ACID	1	3	3	1
PERACETIC ACID, < 1%	1	1	4	1
PERACETIC ACID, < 10%	1	-	4	1
PERCHLORIC ACID	1	1	4	1
PERCHLOROETHYLENE	1	1	2	1
PERFLUOROPROPANE	2	-	-	2
PERFLUOROTRIETHYLAMINE	2	-	-	2
PETROLATUM	1	1	1	1
PETROLATUM ETHER	1	2	1	1
PETROLEUM OIL, CRUDE	1	2	1	1
PHENETOLE	1	4	4	1
PHENOL	1	1	4	1
PHENOL, 70%	1	1	4	1
PHENOL, 85%	1	2	4	1
PHENOLIC SULFONATE	1	3	3	1
PHENOLSULFONIC ACID	1	1	3	1
PHENYL AMINE	1	2	4	1
PHENYL ETHYL ETHER	2	4	4	2
PHENYL HYDRAZINE	1	2	2	1
PHENYLACETAMIDE	1	1	-	1
PHENYLACETATE	1	4	3	1
PHENYLACETIC ACID	1	3	3	1
PHENYLBENZENE	1	1	4	1
PHENYLENEDIAMINE	1	4	-	1
PHENYLETHYL ALCOHOL	1	1	-	1
PHENYLETHYL ETHER	1	4	4	1
PHENYLETHYL MALONIC ESTER	1	1	-	1
PHENYLGLYCERINE	1	3	3	1
PHENYLHYDRAZINE	1	3	4	1
PHENYLHYDRAZINE CHLORHYDRATE	2	2	2	2
PHENYLHYDRAZINE HYDROCHLORIDE	1	3	3	1
PHENYLMERCURIC ACETATE	1	4	3	1
PHORONE	1	4	4	1
PHOSGENE	1	4	-	1
PHOSPHINE	1	2	4	1
PHOSPHORIC ACID	1	1	4	1
PHOSPHORIC ACID, 20%	1	1	4	1
PHOSPHORIC ACID, 80%	1	1	4	1
PHOSPHOROUS OXYCHLORIDE	1	-	4	1
PHOSPHOROUS TRICHLORIDE	1	1	4	1
PHOSPHOROUS TRICHLORIDE ACID	1	1	4	1
PHTHALIC ACID	1	2	1	1

O-Ring Chemical Compatibility

The following chemical compatibility chart is for reference only. ABB assumes no responsibility for the accuracy of the following information and strongly suggests testing compatibility before use.

1= Excellent 2= Good 3 = Poor 4 = Not Recommended - = No Information	Kalrez	Viton	EPDM	Markez
PICRIC ACID	1	1	2	1
PICRIC ACID, AQUEOUS	1	1	1	1
PICRIC ACID, MOLTEN	1	1	2	1
PINE NEEDLE OIL	1	1	4	1
PINE OIL	1	1	4	1
PINE TAR	1	1	4	1
PINENE	1	1	4	1
PIPERAZINE	1	1	-	1
PIPERIDINE	1	4	4	1
POLYETHYLENE GLYCOL	1	1	1	1
POLYGLYCEROL	1	3	1	1
POLYGLYCOL	1	3	1	1
POLYVINYL ACETATE EMULSION	1	3	1	1
POTASH, AQUEOUS	1	1	1	1
POTASSIUM ACETATE	1	4	1	1
POTASSIUM ACID SULFATE	1	3	1	1
POTASSIUM ALUM	1	3	1	1
POTASSIUM ALUMINUM SULFATE	1	3	1	1
POTASSIUM ANTIMONATE	1	3	1	1
POTASSIUM BICARBONATE	1	1	1	1
POTASSIUM BICHROMATE	1	3	1	1
POTASSIUM BIFLUORIDE	1	3	1	1
POTASSIUM BISULFATE	1	1	1	1
POTASSIUM BISULFITE	1	1	1	1
POTASSIUM BITARTRATE	1	3	1	1
POTASSIUM BORATE, AQUEOUS	1	1	1	1
POTASSIUM BROMATE, 10%	1	1	1	1
POTASSIUM BROMIDE	1	2	1	1
POTASSIUM CARBONATE	1	2	1	1
POTASSIUM CHLORATE	1	2	1	1
POTASSIUM CHLORIDE	1	1	1	1
POTASSIUM CHROMATE	1	2	1	1
POTASSIUM CITRATE	1	3	1	1
POTASSIUM COPPER CYANIDE	1	1	1	1
POTASSIUM CUPRO CYANIDE	1	1	1	1
POTASSIUM CYANATE	1	3	1	1
POTASSIUM CYANIDE	1	1	1	1
POTASSIUM DICHROMATE	1	1	1	1
POTASSIUM DIPHOSPHATE	1	3	1	1
POTASSIUM FERRICYANIDE	1	2	1	1
POTASSIUM FLUORIDE	1	1	1	1
POTASSIUM GLUCOCYANATE	1	3	1	1
POTASSIUM HYDROXIDE	1	4	1	1
POTASSIUM HYPOCHLORITE	1	4	1	1
POTASSIUM IODATE	1	3	1	1
POTASSIUM IODIDE	1	1	1	1
POTASSIUM METABISULFATE	1	3	1	1
POTASSIUM METACHROMATE	1	3	1	1
POTASSIUM MONOCHROMATE	1	3	1	1
POTASSIUM NITRATE	1	1	1	1
POTASSIUM NITRITE	1	3	1	1
POTASSIUM OXALATE	1	3	1	1
POTASSIUM PERCHLORATE	1	1	1	1
POTASSIUM PERFLUORO ACETATE	1	-	-	1
POTASSIUM PERMANGANATE	1	2	1	1
POTASSIUM PERSULFATE	1	1	1	1
POTASSIUM PHOSPHATE, ACIDIC	1	3	1	1
POTASSIUM PYROSULFATE	1	3	1	1

1= Excellent 2= Good 3 = Poor 4 = Not Recommended - = No Information	Kalrez	Viton	EPDM	Markez
POTASSIUM SALTS	1	1	1	1
POTASSIUM SODIUM TARTRATE	1	3	3	1
POTASSIUM STANNATE	1	3	3	1
POTASSIUM STEARATE	1	2	3	1
POTASSIUM SULFATE	1	1	1	1
POTASSIUM SULFIDE	1	1	3	1
POTASSIUM SULFITE	1	1	1	1
POTASSIUM TARTRATE	1	3	3	1
POTASSIUM THIOCYANATE	1	3	3	1
POTASSIUM THIOSULFATE	1	3	3	1
POTASSIUM TRIPHOSPHATE	1	3	3	1
POTASSIUM, MOLTEN	4	-	-	4
PROPANE	1	1	1	1
PROPANOIC ACID NITRILE	1	3	4	1
PROPANOL	1	1	1	1
PROPANONE	1	4	4	1
PROPARGYL ALCOHOL	1	1	1	1
PROPIONALDEHYDE	1	4	3	1
PROPIONIC ACID	1	4	1	1
PROPIONITRILE	1	4	1	1
PROPYL ACETATE	1	4	4	1
PROPYL ACETONE	1	4	4	1
PROPYL NITRATE	1	1	4	1
PROPYL PROPIONATE	1	4	4	1
PROPYLAMINE	2	4	3	2
PROPYLBENZENE	1	1	-	1
PROPYLENE	1	1	4	1
PROPYLENE CHLORIDE	1	1	-	1
PROPYLENE CHLOROHYDRIN	1	1	-	1
PROPYLENE DICHLORIDE	1	2	-	1
PROPYLENE GLYCOL	1	1	1	1
PROPYLENE IMINE	1	1	-	1
PROPYLENE OXIDE	1	4	4	1
PYRIDINE	1	4	4	1
PYRIDINE OIL	4	4	4	4
PYRIDINE SULFATE	1	3	3	1
PYRIDINE SULFONIC ACID	1	3	3	1
PYROGALLOL	1	1	2	1
PYROLIGNEOUS ACID	1	4	4	1
PYROSULFURIC ACID	1	3	3	1
PYROSULFURYL CHLORIDE	1	1	2	1
PYRROLE	1	4	4	1
PYRUVIC ACID	1	3	3	1
QUINIDINE	1	1	2	1
QUININE	1	1	2	1
QUININE BISULFATE	1	3	3	1
QUININE HYDROCHLORIDE	1	3	3	1
QUININE SULFATE	1	3	3	1
QUININE TARTRATE	1	3	3	1
QUINIZARIN	1	1	2	1
QUINOLINE	1	1	2	1
QUINONE	1	2	2	1
RAFFINATE	1	1	2	1
RAPESEED OIL	1	1	2	1
RESORCINOL	1	1	4	1
RIBOFLAVIN	1	1	2	1
RICINOLEIC ACID	1	1	2	1
ROSIN	1	1	2	1

O-Ring Chemical Compatibility

The following chemical compatibility chart is for reference only. ABB assumes no responsibility for the accuracy of the following information and strongly suggests testing compatibility before use.

1= Excellent 2= Good 3 = Poor 4 = Not Recommended - = No Information	Kalrez	Viton	EPDM	Markez
SACCHARIN SOLUTION	1	3	1	1
SAGROTAN	1	1	1	1
SAL AMMONIAC	1	1	1	1
SALICYLIC ACID	1	1	1	1
SALT WATER	1	1	1	1
SEA SALT	1	1	1	1
SEA WATER	1	1	1	1
SEBACIC ACID	1	2	1	1
SELENIC ACID	1	3	1	1
SELENIUS ACID	1	3	1	1
SHELLAC	1	2	1	1
SILICATE ESTERS	1	1	4	1
SILICIC ACID, AQUEOUS	1	1	1	1
SILICON TETRACHLORIDE	2	-	-	2
SILICON TETRAFLUORIDE	2	-	-	2
SILICONE GREASES	1	1	1	1
SILICONE OILS	1	1	1	1
SILVER BROMIDE	1	3	1	1
SILVER CHLORIDE	1	3	1	1
SILVER CYANIDE	1	2	1	1
SILVER NITRATE	1	1	1	1
SILVER SALTS, AQUEOUS	1	1	1	1
SILVER SULFATE	1	2	1	1
SKELLY, SOLVENT B, C, E	1	1	4	1
SODA ASH	1	1	1	1
SODA, AQUEOUS	1	1	1	1
SODIUM ACETATE	1	4	1	1
SODIUM ACID BISULFATE	1	3	1	1
SODIUM ACID FLUORIDE	1	3	1	1
SODIUM ACID SULFATE	1	3	1	1
SODIUM ALUMINATE	1	2	1	1
SODIUM ALUMINATE SULFATE	1	3	1	1
"SODIUM ANTHRAQUINONE DISULFATE"	1	3	1	1
SODIUM ANTIMONATE	1	3	1	1
SODIUM ARSENATE	1	2	1	1
SODIUM ARSENITE	1	3	1	1
SODIUM BENZOATE	1	2	1	1
SODIUM BICARBONATE	1	1	1	1
SODIUM BICHROMATE	1	3	1	1
SODIUM BIFLUORIDE	1	3	1	1
SODIUM BISULFATE	1	1	1	1
SODIUM BISULFIDE	1	3	1	1
SODIUM BISULFITE	1	1	1	1
SODIUM BITARTRATE	1	3	1	1
SODIUM BORATE	1	1	1	1
SODIUM BROMATE	1	3	1	1
SODIUM BROMIDE	1	2	1	1
SODIUM CARBONATE	1	1	1	1
SODIUM CHLORATE	1	2	1	1
SODIUM CHLORIDE	1	1	1	1
SODIUM CHLORITE	1	3	1	1
SODIUM CHLOROACETATE	1	3	1	1
SODIUM CHROMATE	1	2	1	1
SODIUM CITRATE	1	3	1	1
SODIUM CYANAMIDE	1	3	1	1
SODIUM CYANATE	1	3	1	1
SODIUM CYANIDE	1	1	1	1

1= Excellent 2= Good 3 = Poor 4 = Not Recommended - = No Information	Kalrez	Viton	EPDM	Markez
SODIUM DIACETATE	1	4	3	1
SODIUM DIPHENYL SULFONATE	1	3	3	1
SODIUM DIPHOSPHATE	1	3	3	1
SODIUM DISILICATE	1	3	3	1
SODIUM ETHYLATE	1	3	3	1
SODIUM FERRICYANIDE	1	1	3	1
SODIUM FERROCYANIDE	1	1	3	1
SODIUM FLUORIDE	1	1	3	1
SODIUM FLUOROSILICATE	1	3	3	1
SODIUM GLUTAMATE	1	3	3	1
SODIUM HYDROGEN SULFATE	1	3	3	1
SODIUM HYDROSULFIDE	1	2	3	1
SODIUM HYDROSULFITE	1	3	3	1
SODIUM HYDROXIDE	1	2	2	1
SODIUM HYDROXIDE PELLETS	1	4	2	1
SODIUM HYPOCHLORITE	1	1	2	1
SODIUM HYPOPHOSPHATE	1	3	3	1
SODIUM HYPOPHOSPHITE	1	3	3	1
SODIUM HYPOSULFITE	1	3	3	1
SODIUM IODIDE	1	2	3	1
SODIUM LACTATE	1	3	3	1
SODIUM METAPHOSPHATE	1	1	1	1
SODIUM METASILICATE	1	2	3	1
SODIUM METHYLATE	1	3	3	1
SODIUM MONOPHOSPHATE	1	3	3	1
SODIUM NITRATE	1	1	2	1
SODIUM NITRITE	1	1	2	1
SODIUM OLEATE	1	3	3	1
SODIUM ORTHOSILICATE	1	3	3	1
SODIUM OXALATE	1	3	3	1
SODIUM PERBORATE	1	1	2	1
SODIUM PERCARBONATE	1	3	3	1
SODIUM PERCHLORATE	1	3	3	1
SODIUM PEROXIDE	1	2	2	1
SODIUM PERSULFATE	1	3	3	1
SODIUM PHENOLATE	1	3	3	1
SODIUM PHENOXIDE	1	3	3	1
SODIUM PHOSPHATE, DIBASIC	1	1	1	1
SODIUM PHOSPHATE, TRIBASIC	1	1	1	1
SODIUM PHOSPHATE, MONOBASIC	1	1	1	1
SODIUM PLUMBITE	1	3	3	1
SODIUM PYROPHOSPHATE	1	3	3	1
SODIUM RESINATE	1	3	3	1
SODIUM SALICYLATE	1	3	3	1
SODIUM SALTS	1	1	1	1
SODIUM SILICATE	1	1	1	1
SODIUM STANNATE	1	3	3	1
SODIUM SULFATE	1	1	1	1
SODIUM SULFATE DECAHYDRATE	1	1	4	1
SODIUM SULFATE, ANHYDROUS	1	1	1	1
SODIUM SULFIDE	1	1	2	1
SODIUM SULFITE	1	1	1	1
SODIUM SULFOCYANIDE	1	3	3	1
SODIUM TARTRATE	1	3	3	1
SODIUM TETRABORATE	1	3	3	1
SODIUM TETRAPHOSPHATE	1	3	3	1
SODIUM TETRASULFIDE	1	3	3	1
SODIUM THIOARSENATE	1	3	3	1

O-Ring Chemical Compatibility

The following chemical compatibility chart is for reference only. ABB assumes no responsibility for the accuracy of the following information and strongly suggests testing compatibility before use.

1= Excellent 2= Good 3 = Poor 4 = Not Recommended - = No Information	Kalrez	Viton	EPDM	Markez
SODIUM THIOCYANATE	1	1	1	1
SODIUM THIOSULFATE	1	1	1	1
SODIUM TRICHLOROACETATE	1	3	1	1
SODIUM TRIPHOSPHATE	1	3	1	1
SODIUM TRIPOLYPHOSPHATE	1	2	1	1
SODIUM, MOLTEN	4	-	-	4
SORBITOL	1	2	1	1
SOUR CRUDE OIL	1	4	4	1
SOUR NATURAL GAS	1	4	4	1
SOYBEAN OIL	1	1	3	1
SPERMACETI	1	1	4	1
STANNIC AMMONIUM CHLORIDE	1	3	1	1
STANNIC CHLORIDE	1	1	1	1
STANNIC CHLORIDE, 50%	1	1	1	1
STANNIC TETRACHLORIDE	1	3	1	1
STANNOUS BISULFATE	1	3	1	1
STANNOUS BROMIDE	1	3	1	1
STANNOUS CHLORIDE	1	1	1	1
STANNOUS FLUORIDE	1	1	1	1
STANNOUS SULFATE	1	3	1	1
STARCH SYRUP	1	1	1	1
STARCH, AQUEOUS	1	1	1	1
STAUFFER 7700	1	1	4	1
STEAM	2	2	1	2
STEARIC ACID	1	1	2	1
STODDARD SOLVENT	1	1	4	1
STRONTIUM ACETATE	1	4	1	1
STRONTIUM CARBONATE	1	3	1	1
STRONTIUM CHLORIDE	1	3	1	1
STRONTIUM HYDROXIDE	1	3	1	1
STRONTIUM NITRATE	1	3	1	1
STYRENE	1	2	4	1
SUCCINIC ACID	1	2	1	1
SUCROSE SOLUTIONS	1	1	1	1
SUGAR SYRUP	1	1	1	1
SULFAMIC ACID	1	2	1	1
SULFANILIC ACID	1	3	1	1
SULFANILIC CHLORIDE	1	1	4	1
SULFANILIMIDE	1	1	4	1
SULFITE LIQUORS	1	2	2	1
SULFOLANE	1	2	1	1
SULFONATED OILS	1	1	4	1
SULFONIC ACID	1	3	1	1
SULFONYL CHORIDE	2	3	1	2
SULFUR	1	1	1	1
SULFUR (MOLTEN 250°F)	1	1	3	1
SULFUR CHLORIDE	1	1	4	1
SULFUR DIOXIDE	1	3	1	1
SULFUR DIOXIDE GAS, DRY	1	2	1	1
SULFUR DIOXIDE GAS, WET	1	2	1	1
SULFUR DIOXIDE, LIQUEFIED	1	2	1	1
SULFUR HEXAFLUORIDE	2	2	1	2
SULFUR LIQUORS	1	1	2	1
SULFUR MONOCHLORIDE	1	1	4	1
SULFUR TETRAFLUORIDE	2	3	-	2
SULFUR TRIOXIDE	1	1	2	1
SULFURIC ACID	1	1	1	1
SULFURIC CHLOROHYDRIN	1	3	1	1

1= Excellent 2= Good 3 = Poor 4 = Not Recommended - = No Information	Kalrez	Viton	EPDM	Markez
SULFUROUS ACID	1	3	2	1
SULFURYL CHLORIDE	1	1	4	1
SULPHUR DIOXIDE, AQUEOUS	1	1	4	1
TALLOW	1	1	1	1
T-AMYL METHYL ETHER	1	4	-	1
TANNIC ACID	1	1	1	1
TANNING EXTRACT	1	1	1	1
TAR OIL	1	-	4	1
TAR, BITUMINOUS	1	1	2	1
TARTARIC ACID	1	2	1	1
T-BUTYL ALCOHOL	1	1	2	1
T-BUTYL CATECHOL	1	1	4	1
T-BUTYL MERCAPTAN	1	1	4	1
T-BUTYLCATECHOL	1	1	4	1
TEREPHTHALIC ACID	1	1	3	1
TERPINEOL	1	1	2	1
TERPINYL ACETATE	1	4	2	1
TETRABROMOETHANE	1	1	4	1
TETRABROMOMETHANE	1	1	4	1
TETRABUTYL TITANATE	1	1	2	1
TETRACHLOROETHANE	1	1	4	1
TETRACHLOROETHYLENE	1	1	4	1
TETRAETHYL LEAD	1	1	2	1
TETRAETHYL LEAD BLEND	1	1	2	1
TETRAETHYLORTHOSILICATE	1	1	1	1
TETRAFLUOROMETHANE	1	1	1	1
TETRAHYDROFURAN	1	4	4	1
TETRAHYDRONAPHTHALENE	1	1	4	1
"TETRAMETHYL AMMONIUM HYDROXIDE"	1	3	3	1
TETRAMETHYLDIHYDROPYRIDINE	1	1	2	1
TETRAPHOSPHOGLUCOSATE	1	3	3	1
THIOAMYL ALCOHOL	1	1	1	1
THIODIACETIC ACID	1	3	3	1
THIOETHANOL	1	3	3	1
THIOGLYCOLIC ACID	1	3	3	1
THIOL TP-90B	1	2	4	1
THIOL TP-95	1	2	4	1
THIONYL CHLORIDE	1	2	4	1
THIOPHENE	1	4	4	1
THIOPHOSPHORYL CHLORIDE	1	3	3	1
THIOUREA	1	3	3	1
THORIUM NITRATE	1	3	3	1
TIN AMMONIUM CHLORIDE	1	3	3	1
TIN CHLORIDE	1	1	1	1
TIN TETRACHLORIDE	1	1	1	1
TITANIC ACID	1	3	3	1
TITANIUM DIOXIDE	1	2	3	1
TITANIUM SULFATE	1	3	3	1
TITANIUM TETRACHLORIDE	2	1	2	2
TOLUENE	1	2	4	1
TOLUENE DIISOCYANATE	1	4	4	1
TOLUENE SULFONIC ACID	1	3	3	1
TOLUENE SULFONYL CHLORIDE	1	1	2	1
TOLUENESULFONIC ACID	1	3	3	1
TOLUIDINE	1	3	2	1
TOLUOL	1	3	3	1
TOLUQUINONE	1	1	2	1

O-Ring Chemical Compatibility

The following chemical compatibility chart is for reference only. ABB assumes no responsibility for the accuracy of the following information and strongly suggests testing compatibility before use.

1= Excellent 2= Good 3 = Poor 4 = Not Recommended - = No Information	Kalrez	Viton	EPDM	Markez
TOLYLALDEHYDE, PARA	1	3	1	1
TOSYL ARGININE METHYL ESTER	1	4	3	1
TRIACETIN	1	4	1	1
TRIALLYL PHOSPHATE	1	1	1	1
TRIARYL PHOSPHATE	1	1	1	1
TRIBROMOMETHYLBENZENE	1	1	4	1
TRIBUTOXYETHYL PHOSPHATE	1	2	1	1
TRIBUTYL CITRATE	1	4	1	1
TRIBUTYL MERCAPTAN	1	2	4	1
TRIBUTYL PHOSPHATE	1	4	1	1
TRICHLOROACETIC ACID	1	4	2	1
TRICHLOROACETYL CHLORIDE	1	1	4	1
TRICHLOROBENZENE	1	2	4	1
TRICHLOROETHANE	1	1	4	1
TRICHLOROETHANOLAMINE	1	3	1	1
TRICHLOROETHYL PHOSPHATE	2	4	-	2
TRICHLOROETHYLENE	1	1	4	1
TRICHLOROFLUOROMETHANE	2	2	4	2
TRICHLOROMETHANE	1	1	4	1
TRICHLORONITROMETHANE	1	3	1	1
TRICHLOROPROPANE	1	1	4	1
TRICHLOROSILANE	1	1	4	1
TRICHLOROTRIFLUOROETHANE	2	2	4	2
TRICRESYL PHOSPHATE	1	1	1	1
TRIETHANOLAMINE	2	4	2	2
TRIETHYL ALUMINIUM	1	2	3	1
TRIETHYL BORANE	1	1	3	1
TRIETHYL PHOSPHATE	1	1	4	1
TRIETHYLENE GLYCOL	1	2	1	1
TRIETHYLENETETRAMINE	1	4	1	1
TRIFLUOROACETIC ACID	2	3	1	2
TRIFLUOROETHANE	1	1	4	1
TRIFLUOROMETHANE	1	1	4	1
TRIFLUOROVINYLCYLCHLORIDE	1	1	4	1
TRIGLYCOL	1	1	1	1
TRIISOPROPYLBENZYLCHLORIDE	1	1	4	1
TRIMETHYL BORATE	1	1	4	1
TRIMETHYLAMINE	2	4	1	2
TRIMETHYLBENZENE	1	1	4	1
TRIMETHYLOLPROPANE	1	1	2	1
TRIMETHYLPENTANE	1	1	4	1
TRINITROTOLUENE	1	2	4	1
TRIOCTYL PHOSPHATE	1	2	2	1
TRIPHENYL PHOSPHITE	1	3	1	1
TRIPOLY PHOSPHATE	1	2	1	1
TRIPOTASSIUM PHOSPHATE	1	3	1	1
TRISODIUM PHOSPHATE	1	1	1	1
TUNG OIL	1	1	4	1
TUNGSTEN HEXAFLUORIDE	1	-	-	1
TURBINE OIL	1	1	4	1
TURPENTINE	1	2	4	1
ULTRA PURE DEIONIZED WATER	1	2	2	1
UNDECYLENIC ACID	1	1	4	1
UNDECYLIC ACID	1	1	4	1
"UNSYMMETRICAL DIMETHYL HYDRA-ZINE"	2	4	1	2
URANIUM HEXACHLORIDE	1	1	-	1
UREA	1	1	1	1

1= Excellent 2= Good 3 = Poor 4 = Not Recommended - = No Information	Kalrez	Viton	EPDM	Markez
URIC ACID	1	3	3	1
VALERALDEHYDE	1	4	3	1
VALERIC ACID	1	1	3	1
VANADIUM OXIDE	1	1	1	1
VANADIUM PENTOXIDE	1	1	1	1
VARNISH	1	1	2	1
VASELINE	1	1	1	1
VASELINE OIL	1	1	1	1
VEGETABLE OILS	1	1	1	1
VINEGAR	1	1	2	1
VINYL ACETATE	1	4	4	1
VINYL BENZENE	1	1	2	1
VINYL BENZOATE	1	1	2	1
VINYL CHLORIDE	1	2	4	1
VINYL CYANIDE	1	3	4	1
VINYL FLUORIDE	1	2	2	1
VINYLDIENE CHLORIDE	1	1	2	1
VINYLPYRIDINE	1	1	2	1
VITRIOL, WHITE	1	3	3	1
WATER	1	1	1	1
WAX ALCOHOL	1	1	1	1
WHISKEY	1	1	1	1
WHITE LIQUOR	1	1	1	1
WHITE LYE	2	4	2	2
WHITE OIL	1	1	1	1
WHITE PINE OIL	1	1	2	1
WHITE PINE TAR	1	1	2	1
WHITE SPIRIT	1	1	1	1
WINE	1	1	1	1
WOLMAR SALTS	1	1	1	1
WOOD ALCOHOL	1	4	1	1
WOOD OIL	1	1	1	1
WOOL FAT	1	1	1	1
XENON	1	1	1	1
XYLAMON	1	2	4	1
XYLENE	1	2	4	1
XYLIDINE	1	4	3	1
XYLOL	1	1	4	1
YEAST, AQUEOUS	1	1	1	1
ZEOLITES	1	1	5	1
ZINC ACETATE	1	4	2	1
ZINC AMMONIUM CHLORIDE	1	3	3	1
ZINC CHLORIDE	1	1	1	1
ZINC CHROMATE	1	3	3	1
ZINC CYANIDE	1	3	3	1
ZINC DIETHYLDITHIOCARBAMATE	1	3	3	1
ZINC DIHYDROGEN PHOSPHATE	1	3	3	1
ZINC HYDROSULFITE	1	3	3	1
ZINC NITRATE	1	1	1	1
ZINC OXIDE	1	1	1	1
ZINC PHENOLSULFONATE	1	3	3	1
ZINC PHOSPHATE	1	1	1	1
ZINC SALTS	1	1	1	1
ZINC STEARATE	1	3	3	1
ZINC SULFATE	1	1	1	1
ZINC SULFIDE	1	3	3	1
ZIRCONIUM NITRATE	1	1	1	1

ABB Measurement & Analytics

3400, rue Pierre-Ardouin

Quebec (Quebec)

Canada G1P 0B2

Phone North America: +1 800 858 3847

Phone Worldwide: +1 418 877 8111

ABB Engineering (Shanghai)**Measurement & Analytics**

No. 4528, Nangxin Highway,

Pudong New District Shanghai,

201319, P.R. China

Phone: +86(0) 21 6105 6666

Fax: +86(0) 21 6105 6677

Mail: china.instrumentation@cn.abb.com

ABB Measurement & Analytics

125 E. County Line Road

Warminster, PA 18974

Phone: +1 215 674 6000

Fax: +1 215 674 7183

abb.com/level

For your local ABB contact, visit:

www.abb.com/contacts

For more product information, visit:

www.abb.com/measurement



We reserve the right to make technical changes or modify the contents of this document without prior notice. With regard to purchase orders, the agreed particulars shall prevail. ABB does not accept any responsibility whatsoever for potential errors or possible lack of information in this document.

We reserve all rights in this document and in the subject matter and illustrations contained therein. Any reproduction, disclosure to third parties or utilization of its contents – in whole or in parts – is forbidden without prior written consent of ABB.

©ABB 2022

All rights reserved.