ISMAT

CHEMICAL COMPATIBILITY GUIDE

ENGINEERING
THE SEALS OF TOMORROW

Contents

Sealing Materials – Elastomers

Equipment manufacturers and end users expect sealing systems to operate leak free and to maintain long service life. Reliability is crucial to effective low maintenance cost operations. To find the perfect sealing solution in each individual case both material performance and seal design are critically important. One of the main used material groups for sealings are the elastomers. They show good properties like elasticity or good chemical compatibility. The following tables provide a summary of the various elastomer material groups.

Table 1 – Elastomers

Designation	ISO 1629	ASTM D1418
Acrylonitrile-Butadiene Rubber (Nitrile Rubber)	NBR	NBR
Hydrogenated Acrylonitrile-Butadiene Rubber	HNBR	HNBR
Polyacrylate Rubber	ACM	ACM
Chloroprene Rubber	CR	CR
Ethylene Propylene Diene Rubber	EPDM	EPDM
Silicone Rubber	VMQ	VMQ
Fluorosilicone Rubber	FVMQ	FVMQ
Tetrafluorethylene-Propylene Copolymer Elastomer	FEPM	TFE/P
Butyl Rubber	IIR	IIR
Styrene-Butadiene Rubber	SBR	SBR
Natural Rubber	NR	NR
Fluorocarbon Rubber	FKM	FKM
Perfluoro Rubber	FFKM	FFKM

ASTM = American Society for Testing and Materials
ISO = International Organisation for Standardisation

Application Parameters of Elastomers

Elastomers as all other organic chemicals have limited use. External influences such as various media, oxygen or ozone as well as pressure and temperature will affect the material properties and therefore their sealing capability.

Elastomers will amongst others swell, shrink or harden and develop cracks or even tears.

Approximate Service Temperature Range for Commonly Used Elastomer Types

Nitrile (General Service)	-40°C to +107°C
Nitrile (Low Temperature)	-45°C to +107°C
HNBR	-20°C to +160°C
HNBR (Low Temperature)	-46°C to +160°C
EPDM	-55°C to +100°C
FFKM	-40°C to +315°C
FKM	-18°C to +204°C
FKM GLT	-30°C to +204°C -46°C to +204°C
AFLAS	-5°C to +232°C
Fluorosilicone	-70°C to +200°C
Silicone	-80°C to +200°C
Chloroprene	-40°C to +100°C
ACM	-20°C to +180°C
Polyurethane	-30°C to +80°C
Butyl	-55°C to +100°C
Natural Rubber	-40°C to +70°C

Chemical Compatibility Tables

These tables are intended to assist the user in determining the suitability of various elastomers in many different chemical environments. The ratings are based on a combination of a published literature, actual field experience, and informed judgments. As laboratory tests do not necessarily predict the end-use performance, the users of ISMAT products should conduct their own tests in the actual service conditions to determine the application suitability.

Note:

1. Ratings are based on volume swell which is only one indicator of elastomeric fluid compatibility and may be based on the solubility parameter alone. Fluid attack on the backbone of the polymer chain may show up as a change in physical properties such as hardness, tensile and elongation. Elevated temperatures and extended time of exposure may create more severe conditions than cited in this guide.
2. This information is believed to be reliable, but no representation, guarantees or warranties of any kind are made to its accuracy or suitability for any purpose. The information given here does not necessarily indicate the end product performance. Hence, it is recommended that the users of ISMAT products should conduct their own tests in the actual service conditions to determine the application suitability for the intended applications.

- **Very good suitability**

  Elastomer shows little or no effect from exposure. Little effect on performance and physical properties. Very good resistance.

- **Good suitability**

  Some effects from exposure with some loss of physical properties. Some chemical swelling.

- **Limited suitability**

  Significant swell and loss of physical properties after exposure. Additional tests should be done.

- **The elastomer is unsuitable for application in this media.**

- **Insufficient information available for service in this media.**

Chemical Compatibility Tables – **Series A**

Chemical	ACM	CR	EPDM	FFKM	FKM	FVMQ	HNBR	NBR	VMQ
Acetaldehyde	●	-	●	●	●	●	●	●	-
Acetamide	-	●	●	●	●	●	●	●	●
Acetic Acid	●	●	●	●	●	●	●	●	●
Acetic Acid Chloride	●	●	●	●	●	●	●	●	●
Acetic Acid Vapors	●	●	●	●	●	●	●	●	●
Acetic acid, 96-99,5% (Glacial)	●	●	●	●	●	●	●	●	●
Acetic Anhydride	●	●	●	●	●	●	●	●	●
Acetone	●	●	●	●	●	●	●	●	●
Acetophenone	●	●	●	●	●	●	●	●	●
Acetylacetone	●	●	●	●	●	●	●	●	●
Acetylchloride	●	●	●	●	●	●	●	●	●
Acetylene Gas	●	●	●	●	●	●	●	●	●
Acetylene Tetrabromide	-	●	●	●	●	-	●	●	-
Acrolein	●	●	●	●	●	-	●	●	-
Acrylonitrile	●	●	●	●	●	●	●	●	●
Adipic Acid	●	●	●	●	●	●	●	●	●
Adipic Aciddiethylester	-	-	●	●	●	-	●	●	-
Aero Lubriplate	●	●	●	●	●	●	●	●	●
Aero safe 2300	●	●	●	●	●	●	●	●	●
Aero safe 2300 W	●	●	●	●	●	●	●	●	●
Aero Shell 1 AC Grease	●	●	●	●	●	●	●	●	●
Aero Shell 17 Grease	●	●	●	●	●	●	●	●	●
Aero Shell 7 A Grease	●	●	●	●	●	●	●	●	●
Aero Shell 750	●	●	●	●	●	●	●	●	●
Aero Shell Fluid 4	●	●	●	●	●	●	●	●	●

● Very good suitability ● Good suitability ● Limited suitability ● Unsuitable

Chemical Compatibility Tables – **Series A** (Cont'd)

Chemical	ACM	CR	EPDM	FFKM	FKM	FVMQ	HNBR	NBR	VMQ
Aerozene 50 (50% Hydrazine, 50% UDMH)	-	●	●	●	●	●	●	●	●
Air	●	●	●	●	●	●	●	●	●
Alcohol (Methanol)	●	●	●	●	●	●	●	●	●
Alkyl Arylsulphonic Acid	●	●	●	●	●	●	●	●	●
Alkyl Benzene	●	●	●	●	●	●	●	●	●
Allyl Alcohol (2-Propene-1-ol)	●	●	●	●	●	●	●	●	●
Allyl Chloride (3-Chloro-1-Propene)	-	●	●	●	-	-	●	●	●
Allyl Ketone	●	●	●	●	●	●	●	●	●
Aluminium Acetat	●	●	●	●	●	●	●	●	●
Aluminium Bromide	●	●	●	●	●	●	●	●	●
Aluminium Fluoride	-	●	●	●	●	●	●	●	●
Aluminium Nitrate	●	●	●	●	●	-	●	●	●
Aluminium Phosphate	●	●	●	●	●	●	●	●	●
Aluminium Sulfate	●	●	●	●	●	●	●	●	●
Aluminium-Potassiumsulfate Solution	-	-	●	●	-	-	-	-	-
Aluminum Chloride Solution	●	●	●	●	●	●	●	●	●
Aluminum Hydroxide Solution	●	●	●	●	●	●	●	●	●
Aluminum Sulphate Solution	●	●	●	●	●	●	●	●	●
Ambrex 33 (Mobile)	●	●	●	●	●	●	●	●	●
Ambrex 830 (Mobile)	●	●	●	●	●	●	●	●	●
Amines, primary (such as Methyl, Ethyl, Propyl, Allyl)	●	●	●	●	●	●	●	●	●

● Very good suitability ● Good suitability ● Limited suitability ● Unsuitable

Chemical Compatibility Tables – **Series A** (Cont'd)

Chemical	ACM	CR	EPDM	FFKM	FKM	FVMQ	HNBR	NBR	VMQ
Aminoacetic Acid	●	●	●	●	●	●	●	●	●
Ammonia (gas)	●	●	●	●	●	●	●	●	●
Ammonia (gas, hot)	●	●	●	●	●	●	●	●	●
Ammonia (liquid)	●	-	●	●	●	-	●	●	-
Ammonia Solution	●	-	●	●	●	-	●	●	-
Ammonia, anhydrous	●	●	●	●	●	●	●	●	●
Ammonia, aqueous Solution	●	●	●	●	●	●	●	●	●
Ammonia-Lithium	●	●	●	●	●	●	●	●	●
Ammonium Acetate	-	●	●	●	●	-	●	●	-
Ammonium Carbonate	-	●	●	●	●	-	●	●	-
Ammonium Carbonate Solution	-	●	●	●	-	-	●	●	-
Ammonium Chloride	●	●	●	●	●	●	●	●	●
Ammonium Chloride Solution	-	●	●	●	-	-	●	●	-
Ammonium Fluoride	●	●	●	●	●	●	●	●	●
Ammonium Hydroxide	●	●	●	●	●	-	●	●	-
Ammonium Hydroxide Solution	●	●	●	●	●	-	●	●	-
Ammonium Nitrate Solution	●	●	●	●	-	-	●	●	-
Ammonium Nitrite	-	●	●	●	-	-	●	●	●
Ammonium Phosphate, Monobasic, Dibasic, Tribasic	-	●	●	●	-	-	●	●	●
Ammonium Sulfate Solution	●	●	●	●	●	●	●	●	●
Ammonium Sulfide	●	●	●	●	●	●	●	●	●
Ammonium Thiocyanate	-	-	●	●	-	-	●	●	●

● Very good suitability ● Good suitability ● Limited suitability ● Unsuitable

Chemical Compatibility Tables – **Series A** (Cont'd)

Chemical	ACM	CR	EPDM	FFKM	FKM	FVMQ	HNBR	NBR	VMQ
Amyl Acetate	●	●	●	●	●	●	●	●	●
Amyl Alcohol	●	●	●	●	●	●	●	●	●
Amyl Borate	-	●	●	●	-	-	●	●	-
Amyl Chloride	●	●	●	●	●	●	●	●	●
Amyl Naphtalene	●	●	●	●	●	●	●	●	●
Anderol L-774	●	●	●	●	●	●	●	●	●
Aniline Chlorohydrate	●	●	●	●	●	●	●	●	●
Aniline Liquid	●	●	●	●	●	●	●	●	●
Animal Fats	●	●	●	●	●	●	●	●	●
Anisole	●	●	●	●	●	●	●	●	●
Antimony Chloride	●	●	●	●	●	●	●	●	●
Antimony Chloride, dry	●	●	●	●	●	●	●	●	●
Aqua Regia (Nitric Acid/Hydrochloric Acid)	●	●	●	●	●	●	●	●	●
Argon Gas	●	●	●	●	●	●	●	●	●
Aromatic Fuels (up to 50% Aromatic)	●	●	●	●	●	●	●	●	●
Aromatic Hydrocarbons (100% Aromatic)	●	●	●	●	●	●	●	●	●
Arsenic Acid	●	●	●	●	●	●	●	●	●
Arsenic Acid, Solution	●	●	●	●	●	●	●	●	●
Asphalt, Emulsion	●	●	●	●	●	●	●	●	●
ASTM Test Fuel A	●	●	●	●	●	●	●	●	●
ASTM Test Fuel B	●	●	●	●	●	●	●	●	●
ASTM Test Fuel C	●	●	●	●	●	●	●	●	●
ASTM-Oil IRM 902	●	●	●	●	●	●	●	●	●

● Very good suitability ● Good suitability ● Limited suitability ● Unsuitable

Chemical Compatibility Tables – **Series A** (Cont'd)

Chemical	ACM	CR	EPDM	FFKM	FKM	FVMQ	HNBR	NBR	VMQ
ASTM-Oil IRM 903	●	●	●	●	●	●	●	●	●
ASTM-Oil No.1	●	●	●	●	●	●	●	●	●
ATM-Brake Fluid (Glycolbased)	●	●	●	●	●	●	●	●	●
Automatic-Transmission Fluid	●	●	●	●	●	●	●	●	●
Automotive Gasoline	●	●	●	●	●	●	●	●	●

Chemical Compatibility Tables – **Series B**

Chemical	ACM	CR	EPDM	FFKM	FKM	FVMQ	HNBR	NBR	VMQ
Barium Carbonate	-	-	●	●	●	●	●	●	●
Barium Chloride Solution	●	●	●	●	●	●	●	●	●
Barium Hydroxide Solution	●	●	●	●	●	●	●	●	●
Barium Nitrate Solution	●	●	●	●	●	●	●	●	●
Barium Sulfate	●	●	●	●	●	●	●	●	●
Barium Sulfide Solution	●	●	●	●	●	●	●	●	●
Battery Acid (Sulfuric Acid diluted)	●	●	●	●	●	●	●	●	●
Beef Tallow	●	●	●	●	●	●	●	●	●
Beer	●	●	●	●	●	●	●	●	●
Beet Sugar Sap	●	●	●	●	●	●	●	●	●
Benzaldehyde	●	●	●	●	●	●	●	●	●
Benzenesulfonic Acid	●	●	-	●	●	●	●	●	●
Benzine (Gasoline)	●	●	●	●	●	●	●	●	●

● Very good suitability ● Good suitability ● Limited suitability ● Unsuitable

Chemical Compatibility Tables – **Series B** (Cont'd)

Chemical	ACM	CR	EPDM	FFKM	FKM	FVMQ	HNBR	NBR	VMQ
Benzine 50/Benzene 30/Ethanol 20	●	●	●	●	●	●	●	●	●
Benzine 50/Benzene 50	●	●	●	●	●	●	●	●	●
Benzine 60/Benzene 40	●	●	●	●	●	●	●	●	●
Benzine 70/Benzene 30	●	●	●	●	●	●	●	●	●
Benzine 80/Benzene 20	●	●	●	●	●	●	●	●	●
Benzoic Acid, Solution	●	●	●	●	●	●	●	●	●
Benzol (Benzene)	●	●	●	●	●	●	●	●	●
Benzophenone	●	-	●	●	●	●	-	-	-
Benzyl Alcohol	●	●	●	●	●	●	●	●	●
Benzyl Chloride	●	●	●	●	●	●	●	●	●
Biphenyl	●	●	●	●	●	●	●	●	●
Bitumen	●	●	●	●	●	●	●	●	●
Black Liquor	●	●	●	●	●	-	●	●	-
Blast Furnace Gas	●	●	●	●	●	●	●	●	●
Bleach Solution	●	●	●	●	●	●	●	●	●
Bleaching Powder Solution	●	●	●	●	●	●	●	●	●
Boiler Feed Water	●	●	●	●	●	●	●	●	●
Bone Oil	●	●	●	●	●	●	●	●	●
Borax (Sodiumborate)	●	●	●	●	●	●	●	●	●
Borax Solutions	●	●	●	●	●	●	●	●	●
Boric Acid	●	●	●	●	●	●	●	●	●
Brake Fluids (based on glycol ether)	●	●	●	●	●	●	●	●	●
Brake Fluids (based on mineral oil)	-	●	-	●	●	-	●	●	-
Bromine	●	●	●	●	●	●	●	●	●

● Very good suitability ● Good suitability ● Limited suitability ● Unsuitable

Chemical Compatibility Tables – **Series B** (Cont'd)

Chemical	ACM	CR	EPDM	FFKM	FKM	FVMQ	HNBR	NBR	VMQ
Bromine Solution in Water	●	●	●	●	●	●	●	●	●
Bromine Vapour	●	●	●	●	●	●	●	●	●
Bromobenzene	●	●	●	●	●	●	●	●	●
Bromochlorotrifluoroethan	●	●	●	●	●	●	●	●	●
Bunker Oil	●	●	●	●	●	●	●	●	●
Butadiene	●	●	●	●	●	●	●	●	●
Butandiol	-	●	●	●	●	●	●	●	●
Butane	●	●	●	●	●	●	●	●	●
1-Butanethiol	●	●	●	●	●	●	●	●	●
Butanole	●	●	●	●	●	●	●	●	●
Butantriol	●	●	●	●	●	●	●	●	●
Butene	-	●	●	●	●	●	●	●	●
Buthylphenol	●	●	●	●	●	-	●	●	●
Butter	●	●	●	●	●	●	●	●	●
Buttermilk	●	●	●	●	●	●	●	●	●
Butyl Acetate	●	●	●/●	●	●	●	●	●	●
Butyl Alcohol	●	●	●	●	●	●	●	●	●
Butyl Amine	●	●	-	●	●	●	●	●	●
Butyl Carbitol	●	●	●	●	●	●	●	●	●
Butyl Cellosolve	●	●	●	●	●	●	●	●	-
Butyl Diglycol	-	-	●	●	●	-	●	●	-
Butyl Phthalate	●	●	●	●	●	●	●	●	●
Butyl Pyrocatechol	●	-	●	●	●	●	●	●	-
Butyl Stearate	-	●	●	●	●	●	●	●	●
Butylbenzoate	●	●	●	●	●	●	●	●	-
Butylene	-	●	●	●	●	●	●	●	●

● Very good suitability ● Good suitability ● Limited suitability ● Unsuitable

Chemical Compatibility Tables – **Series B** (Cont'd)

Chemical	ACM	CR	EPDM	FFKM	FKM	FVMQ	HNBR	NBR	VMQ
Butylether	●	●	●	●	●	●	●	●	●
Butyraldehyd	●	●	●	●	●	●	●	●	●
Butyric Acid	●	●	●	●	●	●	●	●	●
Butyric Acid Butyl Ester	●	●	●	●	●	●	●	●	-

Chemical Compatibility Tables – **Series C**

Chemical	ACM	CR	EPDM	FFKM	FKM	FVMQ	HNBR	NBR	VMQ
Calcium Acetate	●	●	●	●	●	●	●	●	●
Calcium Bisulfate	-	-	●	●	●	●	●	●	●
Calcium Bisulfide Solution	●	●	●	●	●	●	●	●	●
Calcium Carbonate	-	●	●	●	●	-	●	●	●
Calcium Carbonate Slurry	●	●	●	●	●	●	●	●	●
Calcium Chloride	●	●	●	●	●	●	●	●	●
Calcium Chloride, brine	●	●	●	●	●	●	●	●	●
Calcium Cyanide	-	●	●	●	-	-	●	●	●
Calcium Hydroxide Solution	●	●	●	●	●	●	●	●	●
Calcium Hypochlorite Solution	●	●	●	●	●	●	●	●	●
Calcium Nitrate	●	●	●	●	●	●	●	●	●
Calcium Oxide	●	-	●	●	●	●	●	●	●
Calcium Phosphate Slurry	●	●	●	●	●	●	●	●	●
Calcium Silikate	-	●	●	●	●	-	●	●	-

● Very good suitability ● Good suitability ● Limited suitability ● Unsuitable

Chemical Compatibility Tables – **Series C** (Cont'd)

Chemical	ACM	CR	EPDM	FFKM	FKM	FVMQ	HNBR	NBR	VMQ
Calcium Sulfate	-	-	●	●	●	●	●	●	●
Calcium Sulfide	○	●	●	●	●	●	●	●	◐
Calcium Sulfite	○	●	●	●	●	●	●	●	●
Calcium Thiosulfate	○	●	●	●	●	●	◐	◐	●
Caliche Solution (Sodium Nitrate)	○	◐	●	●	●	●	◐	◐	◐
Campher	○	◐	○	●	◐	○	●	●	○
Campher Oil	-	○	○	●	◐	-	●	●	-
Cane Sugar Sap	○	-	●	●	●	●	●	●	●
Carbitol	-	◐	◐	●	◐	◐	◐	◐	◐
Carbolic Acid (Penole)	○	○	◐	●	●	●	○	○	○
Carbolineum	○	-	◐	●	●	○	◐	◐	○
Carbon Dioxide, dry	◐	◐	◐	●	●	◐	●	●	◐
Carbon Dioxide, wet	○	◐	◐	●	●	◐	●	●	◐
Carbon Disulfide	○	○	○	●	●	■	○	○	○
Carbon Monoxide	●	◐	●	●	◐	◐	●	●	●
Carbonic Acid	○	◐	●	●	●	◐	●	●	◐
Carboxylic Acids	-	●	●	●	●	●	●	●	●
Casein	-	●	◐	●	●	●	●	●	●
Castor Oil	●	●	◐	●	●	●	●	●	●
Cellosolve (2-Etho-yethanol)	○	○	◐	●	○	○	○	○	○
Celluloseacetat	-	○	◐	●	○	-	●	●	●
Chile Salpetre (Sodium Nitrate)	○	◐	●	●	●	●	◐	◐	◐
Chinawood Oil	-	◐	○	●	●	●	●	●	○
Chloracetic Acid	○	○	●	●	○	◐	○	○	○

● Very good suitability ◐ Good suitability ■ Limited suitability ○ Unsuitable

Chemical Compatibility Tables – **Series C** (Cont'd)

Chemical	ACM	CR	EPDM	FFKM	FKM	FVMQ	HNBR	NBR	VMQ
Chloracetic Acid Ethylester	●	●	●	●	●	●	●	●	●
Chloric Acid	●	●	●	●	●	●	●	●	●
Chloride of Lime	●	●	●	●	●	●	●	●	●
Chlorine Dioxide	●	●	●	●	●	●	●	●	-
Chlorine gas, anhydrous	-	●	●	●	●	-	●	●	-
Chlorine Water	●	●	●	●	●	●	●	●	●
Chlorine, liquid	●	●	●	●	●	●	●	●	●
Chloroacetaldehyde	●	●	●	●	●	●	●	●	●
Chloroacetone	●	●	●	●	●	●	●	●	●
Chloroamine	●	●	●	●	●	●	●	●	●
Chlorobenzene	●	●	●	●	●	●	●	●	●
Chlorobromomethane	●	●	●	●	●	●	●	●	●
Chlorobutadiene	●	●	●	●	●	●	●	●	●
Chloroform	●	●	●	●	●	●	●	●	●
Chloromethyl Ether	●	●	●	●	●	●	●	●	●
Chloronaphthalene	●	●	●	●	●	●	●	●	●
(o)-Chlorophenol	●	●	●	●	●	●	●	●	●
Chlorosulfonic Acid	●	●	●	●	●	●	●	●	●
Chlorothene	●	●	●	●	●	●	●	●	●
Chlorotoluene	●	●	●	●	●	●	●	●	●
Chrome Alum	●	●	●	●	●	-	●	●	●
Chromic Acid	●	●	●	●	●	●	●	●	●
Chromo sulfuric Acid	●	●	●	●	●	●	●	●	●
Cider	●	●	●	●	●	●	●	●	●
CIP fluids, acidic*	●	●	●	●	●	●	●	●	●
CIP fluids, alkaline	●	●	●	●	●	●	●	●	●

● Very good suitability ● Good suitability ● Limited suitability ● Unsuitable

Chemical Compatibility Tables – **Series C** (Cont'd)

Chemical	ACM	CR	EPDM	FFKM	FKM	FVMQ	HNBR	NBR	VMQ
Citric Acid	●	●	●	●	●	●	●	●	●
Citrous Oils	-	●	●	●	●	-	●	●	●
Coal Tar	-	-	●	●	●	●	●	●	●
Cobalt Chlorite	●	●	●	●	●	●	●	●	●
Coca-Cola	●	●	●	●	●	●	●	●	●
Cocoa Butter	-	●	●	●	●	●	●	●	●
Coconut Grease	●	●	●	●	●	●	●	●	●
Coconut Oil	●	●	●	●	●	●	●	●	●
Coconut, Fatty Acid	●	●	●	●	●	●	●	●	●
Cod-liver Oil	●	●	●	●	●	●	●	●	●
Coffee	●	●	●	●	●	●	●	●	●
Coffee Extract	●	●	●	●	●	●	●	●	●
Coke Oven Gas	●	●	●	●	●	●	●	●	●
Copper Acetate Solution	●	●	●	●	●	●	●	●	●
Copper Ammonium Acetate	●	●	●	●	●	●	●	●	●
Copper Chloride, Solution	●	●	●	●	●	●	●	●	●
Copper Cyanide	●	●	●	●	●	●	●	●	●
Copper Fluoride	●	●	●	●	●	●	●	●	●
Copper Nitrate	●	●	●	●	●	●	●	●	●
Copper Sulfate (Blue Vitriol) Solution	●	●	●	●	●	●	●	●	●
Corn Oil	●	●	●	●	●	●	●	●	●
Cotton Oil	●	●	●	●	●	●	●	●	●
Cottonseed Oil	●	●	●	●	●	●	●	●	●
Cresol	●	●	●	●	●	●	●	●	●
Crontonaldehyde	●	●	●	●	●	●	●	●	●

● Very good suitability ● Good suitability ● Limited suitability ● Unsuitable

Chemical Compatibility Tables – **Series C** (Cont'd)

Chemical	ACM	CR	EPDM	FFKM	FKM	FVMQ	HNBR	NBR	VMQ
Crude Oil	-	●	●	●	●	●	●	●	●
Cumene	●	●	●	●	●	●	●	●	●
Cuprous Ammonia Acetate Solution	●	●	●	●	●	●	●	●	●
Cyanic Acid	●	●	●	●	●	●	●	●	-
Cyanic Acid Solution	●	●	●	●	●	●	●	●	-
Cyclohexane	●	●	●	●	●	●	●	●	●
Cyclohexanole	-	●	●	●	●	●	●	●	-
Cyclohexanone	●	●	●	●	●	●	●	●	●
Cyclohexylamine	●	●	●	●	●	●	●	●	●
(p)-Cymene	●	●	●	●	●	●	●	●	●

Chemical Compatibility Tables – **Series D**

Chemical	ACM	CR	EPDM	FFKM	FKM	FVMQ	HNBR	NBR	VMQ
DDT Solutions (Kerosene Solvent)	●	●	●	●	●	●	●	●	●
DDT Solutions (Toluene Solvent)	●	●	●	●	●	●	●	●	●
Decalin (Decahydronaphtalene)	●	●	●	●	●	●	●	●	●
Decane	●	●	●	●	●	●	●	●	●
Dextrin	●	●	●	●	●	●	●	●	●
Dextrose	●	-	●	●	●	●	●	●	●
Di-Isobutyl Ketone	●	●	●	●	●	●	●	●	●

● Very good suitability ● Good suitability ● Limited suitability ● Unsuitable

Chemical Compatibility Tables – **Series D** (Cont'd)

Chemical	ACM	CR	EPDM	FFKM	FKM	FVMQ	HNBR	NBR	VMQ
Di-Isobutylene	●	●	●	●	●	●	●	●	●
Di-Isooctyl Sebacate	●	●	●	●	●	●	●	●	●
Di-Isopropyl Benzene	●	●	●	●	●	●	●	●	●
Di-Isopropyl Ketone	●	●	●	●	●	●	●	●	●
Diacetone	-	-	●	●	●	●	-	-	-
Diacetone Alcohol	●	●	●	●	●	●	●	●	●
1,2-Diaminoethane	●	●	●	●	●	●	●	●	●
Diamylamine	●	●	●	●	●	●	●	●	●
Diazinone	-	●	●	●	●	●	●	●	●
Dibenzyl Sebacate	●	●	●	●	●	●	●	●	●
Dibenzylether	●	-	●	●	●	-	●	●	●
Dibromodifluoromethane	●	●	●	●	-	●	●	●	●
Dibromomethylbenzene	●	●	●	●	●	●	●	●	●
Dibutyl Ether	●	●	●	●	●	●	●	●	●
Dibutyl Phthalate	●	●	●	●	●	●	●	●	●
Dibutyl Sebacate	●	●	●	●	●	●	●	●	●
Dibutylamine	●	●	●	●	●	●	●	●	●
Dichloro Acetic Acid	●	●	●	●	●	-	●	●	●
Dichloro Acetic Acid Methylester	●	●	●	●	●	●	●	●	●
Dichloro-iso-propylene ether	●	●	●	●	●	●	●	●	●
Dichlorobutane	●	●	●	●	●	●	●	●	●
Dichlorobutylene	●	●	●	●	●	●	●	●	●
Dichloroethane	●	●	●	●	●	●	●	●	●
Dichloroethylene	-	●	●	●	●	-	●	●	●

● Very good suitability ● Good suitability ● Limited suitability ● Unsuitable

Chemical Compatibility Tables – **Series D** (Cont'd)

Chemical	ACM	CR	EPDM	FFKM	FKM	FVMQ	HNBR	NBR	VMQ
Dichloromethane	●	●	●	●	●	●	●	●	●
Dichloropentane	●	●	●	●	●	●	●	●	●
3,1-Dichloropropene	-	●	●	●	-	-	●	●	●
Dicholorobenzene	●	●	●	●	●	●	●	●	●
Dicyclohexylamine	●	●	●	●	●	●	●	●	●
Diesel Fuel	●	●	●	●	●	●	●	●	●
Diesel Oil	●	●	●	●	●	●	●	●	●
Diethanolamine	●	●	●	●	●	●	●	●	●
Diethyl Amin	●	●	●	●	●	●	●	●	●
Diethyl Aniline	●	●	●	●	●	●	●	●	●
Diethyl Benzene	●	●	●	●	●	●	●	●	●
Diethyl Carbonate	●	●	●	●	●	●	●	●	●
Diethyl Ether	●	●	●/●	●	●	●	●	●	●
Diethyl Formaldehyde	●	●	●	●	●	●	●	●	●
Diethyl Hydrazine	●	●	●	●	●	●	●	●	●
Diethyl Maleate	●	●	●	●	●	●	●	●	●
Diethyl Sebacate	●	●	●	●	●	●	●	●	●
Diethyl Sulfate	-	-	-	●	●	-	●	●	●
Diethylene Glycol	●	●	●	●	●	●	●	●	●
Diethylene Triamine	●	●	●	●	●	●	●	●	●
Diglycolic Acid	●	●	●	●	●	●	●	●	●
Dihexyl Phthalic Acid Ester	●	●	-	●	●	-	●	●	●
Dihydroxy Tartaric Acid (Tartaric Acid)	●	●	●	●	●	●	●	●	●
1,4-Dihydroxybenzene	●	●	●	●	●	●	●	●	●
Dimethyl Amine	●	●	●	●	●	●	●	●	●

● Very good suitability ● Good suitability ● Limited suitability ● Unsuitable

Chemical Compatibility Tables – **Series D** (Cont'd)

Chemical	ACM	CR	EPDM	FFKM	FKM	FVMQ	HNBR	NBR	VMQ
Dimethyl Aniline	●	●	●	●	●	●	●	●	●
Dimethyl Ether	●	●	●	●	●	●	●	●	●
Dimethyl Formamide	●	●	●/●	●/●	●	●	●	●	●
Dimethyl Hydrazine	-	●	●	●	●	●	●	●	●
Dimethyl Ketone	●	●	●	●	●	●	●	●	●
Dimethyl Phenol	-	●	●	●	●	●	●	●	●
Dimethyl Phthalate	●	●	●	●	●	●	●	●	-
Dimethylbutane	●	●	●	●	●	●	●	●	●
Dinitro Toluene	●	●	●	●	●	●	●	●	●
Dinitrogene Oxid	●	●	●	●	●	●	●	●	●
Dioctyl Amine	●	●	●	●	●	●	●	●	●
Dioctyl Phthalate	●	●	●	●	●	●	●	●	●
Dioctyl Sebacate	●	●	●	●	●	●	●	●	●
Dioxane	●	●	●	●	●	●	●	●	●
Dioxolane	-	●	●	●	●	●	●	●	●
Dipentene	●	●	●	●	●	●	●	●	●
Diphenyl	●	●	●	●	●	●	●	●	●
Diphenyl Ether	●	●	●	●	●	●	●	●	●
Diphenyle Oxide	-	-	●	●	●	●	●	●	●
Dipropylene Glycol	●	●	●	●	●	●	●	●	●
Dithionite	-	●	●	●	●	●	●	●	●
Divinyl Benzene	●	●	●	●	●	●	●	●	●
DMT (Dimethyl Terephthalate)	●	●	●	●	●	●	●	●	●
DNCB (Dinitrochlorobenzene)	●	●	●	●	●	●	●	●	●

● Very good suitability ● Good suitability ● Limited suitability ● Unsuitable

Chemical Compatibility Tables – **Series D** (Cont'd)

Chemical	ACM	CR	EPDM	FFKM	FKM	FVMQ	HNBR	NBR	VMQ
Dodecanol	-	🟢	🟡	🟢	🟢	-	🟡	🟡	-
Domestic Fuel Oils	🟢	🟡	⚪	🟢	🟢	🟢	🟢	🟢	⚪
Dowtherm A	⚪	⚪	⚪	🟢	🟢	🟡	⚪	⚪	⚪
Dowtherm E	⚪	⚪	⚪	🟢	🟢	🟡	⚪	⚪	⚪
Duodecanol (Laurylalcohol)	🟡	🟢	🟡	🟢	🟢	⚪	🟡	🟡	🟢

Chemical Compatibility Tables – **Series E**

Chemical	ACM	CR	EPDM	FFKM	FKM	FVMQ	HNBR	NBR	VMQ
Epichlorhydrin	⚪	⚪	🟡	🟢	⚪	⚪	⚪	⚪	⚪
Essential Oils	⚪	⚪	⚪	🟢	🟡	🟡	⚪	⚪	⚪
Ethane	🟢	🟡	⚪	🟢	🟢	🟢	🟢	🟢	🟡
Ethanol Amine	⚪	🔴	🟡	🟢	⚪	⚪	🔴	🔴	🔴
Ether	⚪	⚪	🔴	🟢	⚪	⚪	⚪	⚪	⚪
Ethyl Acetate	⚪	⚪	🟡/🔴	🟢	⚪	⚪	⚪	⚪	⚪
Ethyl Alcohol, Ethanol	⚪	🟢	🟢	🟢	⚪	🟢	🟢	🟢	🟡
Ethyl Benzene	⚪	⚪	⚪	🟢	🟡	🟡	⚪	⚪	⚪
Ethyl Bromide	⚪	⚪	⚪	🟢	🟢	🟢	🟡	🟡	⚪
Ethyl Cellulose	⚪	🟡	🟡	🟢	⚪	⚪	🟡	🟡	⚪
Ethyl Hexanole	⚪	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟡
Ethyl Oxalate	⚪	⚪	🟢	🟢	🟢	🟡	⚪	⚪	⚪
Ethyl Pentachlorobenzene	⚪	⚪	⚪	🟢	🟢	🟡	⚪	⚪	⚪
Ethyl Pyridine	⚪	⚪	🟢	🟢	🔴	⚪	⚪	⚪	⚪

🟢 Very good suitability 🟡 Good suitability 🔴 Limited suitability ⚪ Unsuitable

Chemical Compatibility Tables – **Series E** (Cont'd)

Chemical	ACM	CR	EPDM	FFKM	FKM	FVMQ	HNBR	NBR	VMQ
Ethyl Sulfate (Diethyl Sulfate)	●	●	●	●	●	●	●	●	●
Ethylacrylate	●	●	-	●	●	●	●	●	●
Ethylchloride	●	●	●	●	●	●	●	●	●
Ethylchloroacetate	-	●	●	●	●	●	●	●	●
Ethylene	●	●	●	●	●	●	●	●	●
Ethylene Bromide	●	●	●	●	●	●	●	●	●
Ethylene Chloride	-	●	●	●	●	-	-	-	●
Ethylene Chlorohydrin	●	●	●	●	●	●	●	●	●
Ethylene Diamine	●	●	●	●	●	●	●	●	●
Ethylene Dibromide	●	●	●	●	●	●	●	●	●
Ethylene Dichloride	●	●	●	●	●	●	●	●	●
Ethylene Glycol	●	●	●	●	●	●	●	●	●
Ethylene Glycol Ethylether (Cellosolve)	●	●	●	●	●	●	●	●	●
Ethylene Oxide	●	●	●	●	●	●	●	●	●
Ethylene Silicate	-	●	●	●	●	●	●	●	-
Ethylene Trichloride	●	●	●	●	●	●	●	●	●

Chemical Compatibility Tables – **Series F**

Chemical	ACM	CR	EPDM	FFKM	FKM	FVMQ	HNBR	NBR	VMQ
Fats (animal/vegetable)	●	●	●	●	●	●	●	●	●
Fatty Acids	●	●	●	●	●	●	●	●	●

● Very good suitability ● Good suitability ● Limited suitability ● Unsuitable

Chemical Compatibility Tables – **Series F** (Cont'd)

Chemical	ACM	CR	EPDM	FFKM	FKM	FVMQ	HNBR	NBR	VMQ
Ferric Chloride Solution	-	🟡	🟢	🟢	🟢	🟢	🟢	🟢	🟡
Ferric Nitrates	🟡	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟡
Ferric Sulfate (Ferric Vitrinol)	🟡	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟡
Ferric Sulfate Solution	-	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟡
Fir Oil	⚪	⚪	⚪	🟢	🟢	🟢	🟡	🟡	⚪
Fish Oil	🟢	🟡	⚪	🟢	🟢	🟢	🟢	🟢	🟢
Fluorine	⚪	-	⚪	🟡	⚪	⚪	⚪	⚪	⚪
Fluorobenzene	⚪	⚪	⚪	🟢	🟡	🟡	⚪	⚪	⚪
Fluorosilicic Acid	-	🟡	🟢	🟢	🟢	⚪	🟡	🟡	⚪
Formaldehyde (Formalin-Solution)	⚪	⚪	🟢	🟢	⚪	⚪	🔴	🔴	🔴
Formaldehyde (Methanal)	⚪	⚪	🟢	🟢	🟡	⚪	🟡	🟡	🟡
Formamide	-	⚪	🟢	🟢	🟡	-	🟡	🟡	-
Formic Acid	⚪	🟡	🟡	🟢	⚪	⚪	⚪	⚪	⚪
Freon 11	-	⚪	⚪	🟡	🟡	🟡	🟢	🟢	⚪
Freon 112	-	🟡	⚪	🟢	🟡	🟡	🟡	🟡	⚪
Freon 113	-	🟢	⚪	🟡	🟡	⚪	🟢	🟢	⚪
Freon 114	-	🟢	🟢	🟡	🟡	🟡	🟢	🟢	⚪
Freon 114 B2	-	🟡	⚪	🟡	🟡	🟡	🟡	🟡	⚪
Freon 115	-	🟢	🟢	🟡	🟡	🟡	🟢	🟢	⚪
Freon 12	-	🟢	🟡	🟡	🟡	⚪	🟡	🟡	⚪
Freon 13	-	🟢	🟢	🟡	🟡	⚪	🟢	🟢	⚪
Freon 13 B1	-	🟢	🟢	🟡	🟡	⚪	🟢	🟢	⚪
Freon 134 a	-	-	🟢	🟡	-	-	🟢	-	-
Freon 14	-	🟢	🟢	🟡	🟡	🟡	🟢	🟢	⚪

🟢 Very good suitability 🟡 Good suitability 🔴 Limited suitability ⚪ Unsuitable

Chemical Compatibility Tables – **Series F** (Cont'd)

Chemical	ACM	CR	EPDM	FFKM	FKM	FVMQ	HNBR	NBR	VMQ
Freon 142 b	-	●	●	●	●	-	●	●	●
Freon 152 a	-	●	●	●	●	-	●	●	-
Freon 21	●	●	●	●	●	●	●	●	●
Freon 218	-	●	●	●	●	-	●	●	-
Freon 22	●	●	●	●	●	●	●	●	●
Freon 31	-	●	●	●	●	●	●	●	●
Freon 32	-	●	●	●	●	●	●	●	●
Freon 502	-	●	●	●	●	-	●	●	●
Freon BF	-	●	●	●	●	-	●	●	●
Freon C316	-	●	●	●	-	-	●	●	●
Freon C318	-	●	●	●	●	●	●	●	●
Freon MF	-	●	●	●	●	-	●	●	●
Freon PCA	-	●	●	●	●	-	●	●	●
Freon T-P35	-	●	●	●	●	-	●	●	●
Freon TA	-	●	●	●	●	-	●	●	●
Freon TC	-	●	●	●	●	-	●	●	●
Freon TF	-	●	●	●	●	●	●	●	●
Freon TMC	-	●	●	●	●	-	●	●	●
Freon TWD602	-	●	●	●	●	●	●	●	-
Fruit Juices	●	●	●	●	●	●	●	●	●
Fumaric Acid	●	●	-	●	●	●	●	●	●
Furan	●	●	●	●	●	●	●	●	●
Furfural (Furfurylaldehyde)	-	-	-	●	-	-	●	●	-
Furfurylalcohol	-	-	-	●	-	-	-	-	-

● Very good suitability ● Good suitability ● Limited suitability ● Unsuitable

Chemical Compatibility Tables – **Series G**

Chemical	ACM	CR	EPDM	FFKM	FKM	FVMQ	HNBR	NBR	VMQ
Gallic Acid	●	●	●	●	●	●	●	●	●
Gas Oil	●	●	●	●	●	●	●	●	●
Gasoline/Alcohol Mix	●	●	●	●	●	●	●	●	●
Gasoline, 100 Octane	●	●	●	●	●	●	●	●	●
Gasoline, 130 Octane	●	●	●	●	●	●	●	●	●
Gasoline, aromatic	●	●	●	●	●	●	●	●	●
Gasoline, Ethyl and Regular	●	●	●	●	●	●	●	●	●
Gasoline, Refined	●	●	●	●	●	●	●	●	●
Gasoline, Sour	●	●	●	●	●	●	●	●	●
Gasoline, with Mercaptan	●	●	●	●	●	●	●	●	●
Gelatin	●	●	●	●	●	●	●	●	●
Generator Gas	●	●	●	●	●	●	●	●	●
Glauber's Salt	●	●	●	●	●	●	●	●	●
Glucose solution	●	●	●	●	●	●	●	●	●
Glucose, aqueos	●	●	●	●	●	●	●	●	●
Glycerin (Glycerol)	●	●	●	●	●	●	●	●	●
Glycerol	●	●	●	●	●	●	●	●	●
Glycerol Chlorohydrin	-	●	●	●	●	-	●	●	-
Glycerol Triacetate (Triacetin)	●	●	●	●	●	●	●	●	●
Glycerol Trinitrate (Nitroglycerin)	●	●	●	●	●	●	●	●	●
Glycine	●	●	●	●	●	●	●	●	●
Glycolic Acid	●	●	●	●	●	●	●	●	●

● Very good suitability ● Good suitability ● Limited suitability ● Unsuitable

Chemical Compatibility Tables – **Series H**

Chemical	ACM	CR	EPDM	FFKM	FKM	FVMQ	HNBR	NBR	VMQ
HEF-3	●	●	●	●	●	●	●	●	●
Helium Gas	●	●	●	●	●	●	●	●	●
Heptane	●	●	●	●	●	●	●	●	●
Hexachloro Acetone	●	●	●	●	●	●	●	●	●
Hexachloro Butadiene	●	●	●	●	●	●	●	●	●
Hexachloro Cyclohexane (Lindane)	●	●	●	●	●	●	-	-	●
1-Hexadecanol	-	●	●	●	-	-	●	●	-
Hexafluorosilicic Acid	●	●	●	●	●/●	-	●	●	●
Hexaldehyd	-	●	●	●	●	●	●	●	●
Hexalin (Cyclohexanol)	-	●	●	●	●	●	●	●	●
Hexamine	●	●	●	●	●	●	●	●	●
Hexanal (Capronaldehyde)	●	-	●	●	●	●	-	-	●
Hexane	●	●	●	●	●	●	●	●	●
Hexanetriol	●	●	●	●	●	●	●	●	●
Hexene	●	●	●	●	●	●	●	●	●
Hexyl Alcohol	●	●	●	●	●	●	●	●	●
Hydrazine	●	●	●	●	●	●	●	●	●
Hydrazine Hydrate	●	●	●	●	●	●	●	●	●
Hydrobromic Acid	●	●	●	●	●	●	●	●	●
Hydrochlorique Acid (Muriatic Acid) 37%	●	●	●	●	●	●	●	●	●
Hydrocyanic Acid	●	●	●	●	●	●	●	●	-
Hydrofluoric Acid (cold)	●	●	●	●	●	●	●	●	●
Hydrofluoric Acid (hot)	●	-	●	●	●	●	●	●	●
Hydrogen Chloride Gas	-	●	●	●	●	●	●	●	●
Hydrogen Fluoride	●	●	●/●	●	-	●	●	●	●

● Very good suitability ● Good suitability ● Limited suitability ● Unsuitable

Chemical Compatibility Tables – **Series H** (Cont'd)

Chemical	ACM	CR	EPDM	FFKM	FKM	FVMQ	HNBR	NBR	VMQ
Hydrogen Peroxide, concentrated	●	●	●	●	●–●	●	●	●	●
Hydrogen Sulfide	●	●	●	●	●	●	●	●	●
Hydrogen, Gas	●	●	●	●	●	●	●	●	●
Hydrogene Bromide, unhydrous	●	●	●	●	●	●	●	●	●
Hydrogensulfite Leach	●	●	●	●	●	-	●	●	-
Hydroquinone	●	●	●	●	●	●	●	●	●
Hydroxy Acetic Acid	●	●	●	●	●	●	●	●	●
Hydroxylamine	-	-	●	●	●	●	●	●	●
Hydroxylamine Sulfate	-	●	●	●	●	●	●	●	●
Hypochlorous Acid	●	●	●	●	●	-	●	●	-

Chemical Compatibility Tables – **Series I**

Chemical	ACM	CR	EPDM	FFKM	FKM	FVMQ	HNBR	NBR	VMQ
Ink	●	●	●	●	●	●	●	●	●
Iodine	-	●	●	●	●	●	●	●	-
Iodine tincture	●	●	●	●	●	●	●	●	●
Iodoform	-	-	●	●	●	-	-	-	-
Iso-Butane	●	●	●	●	●	●	●	●	●
Iso-Butyl Alcohol	●	●	●	●	●	●	●	●	●
Iso-Butyl Methyl Ketone	●	●	●	●	●	●	●	●	●
Iso-Butylene	●	●	●	●	●	●	●	●	●

● Very good suitability ● Good suitability ● Limited suitability ● Unsuitable

Chemical Compatibility Tables – **Series I** (Cont'd)

Chemical	ACM	CR	EPDM	FFKM	FKM	FVMQ	HNBR	NBR	VMQ
Iso-Butyraldehyde	●	●	●	●	●	●	●	●	●
Iso-Cyanate	-	-	●	●	-	-	-	-	-
Iso-Dodecane	●	●	●	●	●	●	●	●	●
Iso-Octane	●	●	●	●	●	●	●	●	●
Iso-Pentane	●	●	●	●	●	●	●	●	●
Iso-Propyl-Acetate	●	●	●	●	●	●	●	●	●
Iso-Propyl-Alcohol	●	●	●	●	●	●	●	●	●
Iso-Propyl-Benzene	●	●	●	●	●	●	●	●	●
Iso-Propyl-Chloride	●	●	●	●	●	●	●	●	●
Iso-Propyl-Ether	●	●	●	●	●	●	●	●	●

Chemical Compatibility Tables – **Series J**

Chemical	ACM	CR	EPDM	FFKM	FKM	FVMQ	HNBR	NBR	VMQ
Jet Fuel JP3	●	●	●	●	●	●	●	●	●
Jet Fuel JP4	●	●	●	●	●	●	●	●	●
Jet Fuel JP5	●	●	●	●	●	●	●	●	●
Jet Fuel JP6	●	●	●	●	●	●	●	●	●
JP3 (Fuel)	●	●	●	●	●	●	●	●	●
JP4 (Fuel)	●	●	●	●	●	●	●	●	●
JP5 (Fuel)	●	●	●	●	●	●	●	●	●
JP6 (Fuel)	●	●	●	●	●	●	●	●	●
JPX (Fuel)	-	●	●	●	●	●	●	●	●

● Very good suitability ● Good suitability ● Limited suitability ● Unsuitable

Chemical Compatibility Tables – Series K

Chemical	ACM	CR	EPDM	FFKM	FKM	FVMQ	HNBR	NBR	VMQ
Kerosene	🔴	⚪	⚪	🟢	🟢	🟡	🟢	🟢	⚪
Ketchup	⚪	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢

Chemical Compatibility Tables – Series L

Chemical	ACM	CR	EPDM	FFKM	FKM	FVMQ	HNBR	NBR	VMQ
Lactams	⚪	🔴	⚪	🟢	⚪	⚪	⚪	⚪	⚪
Lactic Acid	⚪	🟢	🟡	🟢	🟢	🟢	🟡	🟡	🟡
Lanolin	🟢	🟡	⚪	🟢	🟢	🟢	🟢	🟢	🟡
Latex	⚪	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢
Laughing Gas (N20)	🟢	🟢	🟡	🟢	🟢	🟢	🟢	🟢	🟢
Lavender Oil	🟡	⚪	⚪	🟢	🟢	🟡	🟡	🟡	⚪
Lead Acetate Salt Solution	⚪	⚪	🟢	🟢	⚪	⚪	🔴	🔴	⚪
Lead Arsenate	-	-	🟢	🟢	-	-	🟢	🟢	🟢
Lead Nitrate	-	🟡	🟢	🟢	🟢	🟢	🟢	🟢	🟡
Lead Nitrate Solution	-	🟢	🟢	🟢	-	🟢	🟢	🟢	🟡
Lead Sulfate	⚪	🟢	🟢	🟢	🟢	🟢	🟡	🟡	🟡
Lemon Juice	⚪	🟡	🟢	🟢	🟢	-	🟢	🟢	🟢
Ligroin	-	🟡	⚪	🟢	🟢	🟢	🟢	🟢	⚪
Lindol	⚪	⚪	🟢	🟢	⚪	🔴	⚪	⚪	🔴
Linoleic Acid	-	-	⚪	🟢	🟢	-	🟡	🟡	🟡
Linseed Oil	🟡	🟡	🔴	🟢	🟢	🟡	🟢	🟢	🟡
Liqueurs	🟡	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢

🟢 Very good suitability 🟡 Good suitability 🔴 Limited suitability ⚪ Unsuitable

Chemical Compatibility Tables – **Series L** (Cont'd)

Chemical	ACM	CR	EPDM	FFKM	FKM	FVMQ	HNBR	NBR	VMQ
Lithium Bromide Brine	●	●	●	●	●	●	●	●	●
Lithium Chloride	●	●	●	●	●	●	●	●	●
Lithium Hydroxide	●	●	●	●	-	●	●	●	●

Chemical Compatibility Tables – **Series M**

Chemical	ACM	CR	EPDM	FFKM	FKM	FVMQ	HNBR	NBR	VMQ
Machinery Oil (mineral)	●	●	●	●	●	●	●	●	●
Maganese Chloride (Solution)	●	●	●	●	●	●	●	●	●
Magnesium Acetate Solution	●	●	●	●	●	●	●	●	●
Magnesium Chloride Solution	-	●	●	●	●	●	●	●	●
Magnesium Hydroxide (Solution)	●	●	●	●	●	●	●	●	●
Magnesium Silicate (Talcum)	●	●	●	●	●	●	●	●	●
Magnesium Sulfate (Epson Salts)	●	●	●	●	●	●	●	●	●
Maleic Acid	●	●	●	●	●	●	●	●	●
Maleic Anhydride	●	●	●	●	●	-	●	●	-
Malic Acid	●	●	●	●	●	●	●	●	●
Margarine	●	●	●	●	●	●	●	●	●
Mayonaise	-	●	●	●	●	●	●	●	●

● Very good suitability ● Good suitability ● Limited suitability ● Unsuitable

Chemical Compatibility Tables – **Series M** (Cont'd)

Chemical	ACM	CR	EPDM	FFKM	FKM	FVMQ	HNBR	NBR	VMQ
Menthol	⚪	🟡	🟡	🟢	🟢	⚪	🟡	🟡	⚪
Mercaptans	⚪	⚪	🟢	🟢	⚪	⚪	⚪	⚪	⚪
Mercuric Chloride Solution	-	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢
Mercury	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢
Mercury Nitrate	-	🟢	🟢	🟢	-	-	🟢	🟢	🟢
Mesityl Oxide	⚪	⚪	🟢	🟢	⚪	⚪	⚪	⚪	⚪
Methacrylic Acid	⚪	⚪	🟡	🟢	⚪	⚪	⚪	⚪	⚪
Methanal	⚪	⚪	🟢	🟢	🟡	⚪	🟡	🟡	🟡
Methane	🟡	🟡	⚪	🟢	🟢	🔴	🟢	🟢	⚪
Methanol	🔴	🟡	🟢	🟢	🔴	🟢	🟡	🟡	🟡
Methoxy Benzene	⚪	⚪	⚪	🟢	⚪	⚪	⚪	⚪	⚪
Methoxy Butanol	-	🟡	🟡	🟢	🟢	-	🟢	🟢	-
Methyl Acetate	⚪	🟡/🔴	🟢	🟢	⚪	⚪	⚪	⚪	⚪
Methyl Acetoacetate	⚪	⚪	🟢	🟢	⚪	⚪	⚪	⚪	🟡
Methyl Acrylate	⚪	⚪	🟡	🟢	⚪	⚪	⚪	⚪	⚪
Methyl Alcohol	🔴	🟡	🟢	🟢	🔴	🟢	🟡	🟡	🟡
Methyl Amine	⚪	⚪	🟢	🟢	⚪	⚪	⚪	⚪	⚪
Methyl Aniline	⚪	⚪	🟡	🟢	🟡	-	⚪	⚪	-
Methyl Bromide	⚪	⚪	⚪	🟢	🟢	🟢	⚪	⚪	⚪
Methyl Butyl Ketone	⚪	⚪	🟢	🟢	⚪	⚪	⚪	⚪	⚪
Methyl Carbonate	⚪	⚪	⚪	🟢	⚪	🟡	⚪	⚪	⚪
Methyl Cellosolve	⚪	⚪	🟡	🟢	⚪	⚪	⚪	⚪	⚪
Methyl Cellulose	⚪	🟡	🟡	🟢	🟡	⚪	🟡	🟡	🟡
Methyl Chloride	⚪	⚪	🟡	🟢	🟡	🟡	⚪	⚪	⚪
Methyl Cyclopentane	⚪	⚪	⚪	🟢	🟡	🟡	⚪	⚪	⚪
Methyl Ethyl Ketone	⚪	⚪	🟡	🟢	⚪	⚪	⚪	⚪	⚪

🟢 Very good suitability 🟡 Good suitability 🔴 Limited suitability ⚪ Unsuitable

Chemical Compatibility Tables – **Series M** (Cont'd)

Chemical	ACM	CR	EPDM	FFKM	FKM	FVMQ	HNBR	NBR	VMQ
Methyl Formate	-	●	●	●	●	-	●	●	-
Methyl Glycol	●	●	●	●	●	●	●	●	●
Methyl Glycol Acetate (Ethyleneglycol)	●	●	●	●	●	-	●	●	●
Methyl Iso-Butyl Ketone	●	●	●	●	●	●	●	●	●
Methyl Iso-Propyl Ketone	●	●	●	●	●	●	●	●	●
Methyl Methacrylate	●	●	●	●	●	●	●	●	●
Methyl Methacrylic Acid Ester	●	●	●	●	●	●	●	●	●
Methyl Oleate	-	-	●	●	●	●	●	●	-
Methyl Phenyl Ether (Anisole)	●	●	●	●	●	●	●	●	●
Methyl Pyrrolidone	-	-	●	●	●	-	●	●	●
Methyl Salicylate	-	●	●	●	-	-	●	●	-
Methylene Chloride	●	●	●	●	●	●	●	●	●
2-Methylpentane	●	-	●	●	●	●	●	●	●
3-Methylpentane	●	-	●	●	●	●	●	●	●
Milk	●	●	●	●	●	●	●	●	●
Milk of Lime	●	●	●	●	●	●	●	●	●
Mineral Oil	●	●	●	●	●	●	●/●	●/●	●
Mineral Spirits	●	●	●	●	●	●	●	●	●
Molasses	●	●	●	●	●	●	●	●	●
Monobromobenzene	●	●	●	●	●	●	●	●	●
Monochloroacetic Acid	●	●	●	●	●	●	●	●	●
Monochloroacetic Acid Ethyl Ester	●	●	●	●	●	●	●	●	●
Monochlorobenzene	●	●	●	●	●	●	●	●	●

● Very good suitability ● Good suitability ● Limited suitability ● Unsuitable

Chemical Compatibility Tables – **Series M** (Cont'd)

Chemical	ACM	CR	EPDM	FFKM	FKM	FVMQ	HNBR	NBR	VMQ
Monoethanol Amine	●	●	●	●	●	●	●	●	●
Mononitrochlorobenzene	●	●	●	●	●	●	●	●	●
Morpholine	●	●	●	●	-	-	●	●	●
Muriatic Acid (HCl) (Hydrochloric Acid)	●	-	●	●	●	-	●	●	●
Muriatic Acid (HCl), diluted	●	●	●	●	●	-	●	●	●

Chemical Compatibility Tables – **Series N**

Chemical	ACM	CR	EPDM	FFKM	FKM	FVMQ	HNBR	NBR	VMQ
Naphtha	●	●	●	●	●	●	●	●	●
Naphthalene	●	●	●	●	●	●	●	●	●
Naphthenic Acid	-	●	●	●	●	●	●	●	-
Naphtolen ZD	●	●	●	●	●	-	●	●	●
Natural Gas	●	●	●	●	●	●	●	●	●
Neats Foot Oil	●	●	●	●	●	●	●	●	●
Neon Gas	●	●	●	●	●	●	●	●	●
Nickel Acetate	●	●	●	●	●	●	●	●	●
Nickel Chloride	●	●	●	●	●	●	●	●	●
Nickel Nitrate	-	●	●	●	●	-	●	●	●
Nickel Sulfate	●	●	●	●	●	●	●	●	●
Nitrating Acids	●	●	●	●	●	●	●	●	●
Nitric Acid, concentrated	●	●	●	●	●	●	●	●	●
Nitric Acid, fuming	●	●	●	●	●	●	●	●	●

● Very good suitability ● Good suitability ● Limited suitability ● Unsuitable

Chemical Compatibility Tables – Series N (Cont'd)

Chemical	ACM	CR	EPDM	FFKM	FKM	FVMQ	HNBR	NBR	VMQ
Nitro Benzene	●	●	●	●	●	●	●	●	●
Nitro Glycerin	●	●	●	●	●	●	●	●	●
Nitro Glycol	●	●	●	●	●	●	●	●	●
Nitro Methane	●	●	●	●	●	●	●	●	●
Nitro Propane	●	●	●	●	●	●	●	●	●
Nitro Toluene	●	●	●	●	●	●	●	●	●
Nitrogen Gas	●	●	●	●	●	●	●	●	●
Nitrogen Tetroxide	●	●	●	-	●	●	●	●	●
Nonanol	-	-	●	●	●	-	●	●	●
Nut Oil	●	●	●	●	●	●	●	●	●

Chemical Compatibility Tables – Series O

Chemical	ACM	CR	EPDM	FFKM	FKM	FVMQ	HNBR	NBR	VMQ
Octadecane	●	●	●	●	●	●	●	●	●
Octal	●	●	●	●	●	●	●	●	●
Octane	●	●	●	●	●	●	●	●	●
Octanol (Octylalcohol)	●	●	●	●	●	●	●	●	●
Octylalcohol	●	●	●	●	●	●	●	●	●
Octylcresol	●	●	●	●	●	●	●	●	●
Oil of Turpentine	●	●	●	●	●	●	●	●	●
Olefin, crude	●	●	●	●	●	●	●	●	●
Oleic Acid	-	●	●	●	●	-	●	●	●
Oleic Alcohol	●	●	●	●	●	●	●	●	●

● Very good suitability ● Good suitability ● Limited suitability ● Unsuitable

Chemical Compatibility Tables – Series O (Cont'd)

Chemical	ACM	CR	EPDM	FFKM	FKM	FVMQ	HNBR	NBR	VMQ
Oleum (Sulfuric Acid, 0 to 50%)	●	●	●	●	●	●	●	●	●
Olive Oil	●	●	●	●	●	●	●	●	●
Ortho Dichloro Benzene	●	●	●	●	●	●	●	●	●
Oxalic Acid	-	●	●	●	●	●	●	●	●
Ozone	●	●	●/●	●	●	●	●/●	●	●

Chemical Compatibility Tables – Series P

Chemical	ACM	CR	EPDM	FFKM	FKM	FVMQ	HNBR	NBR	VMQ
Palm Kernel Oil	●	●	●	●	●	-	●	●	-
Palm Oil	●	●	●	●	●	●	●	●	●
Palmitic Acid	●	●	●	●	●	●	●	●	●
Para Dichloro Benzene	●	-	●	●	●	●	●	●	●
Paraffin	●	●	●	●	●	●	●	●	●
Paraffin Oil	●	●	●	●	●	●	●	●	●
Peanut Oil	●	●	●	●	●	●	●	●	●
Pectin	●	●	●	●	●	●	●	●	●
Penta Chloro Diphenyl	●	●	●	●	●	●	●	●	●
Penta Chloro Phenol	-	-	●	●	-	-	●	●	●
Pentane	●	●	●	●	●	●	●	●	●
Pentanol	●	●	●	●	●	●	●	●	●
Perchloric Acid	●	●	●	●	●	●	●	●	●
Perchloro Ethylene	●	●	●	●	●	●	●	●	●

● Very good suitability ● Good suitability ● Limited suitability ● Unsuitable

Chemical Compatibility Tables – **Series P** (Cont'd)

Chemical	ACM	CR	EPDM	FFKM	FKM	FVMQ	HNBR	NBR	VMQ
Petroleum	🟡	🟡	⚪	🟢	🟢	🟡	🟢	🟢	🟡
Petroleum Ether	🟢	🟡	⚪	🟢	🟢	🟡	🟢	🟢	⚪
Phenol	🔴	⚪	⚪	🟢	🟡	-	⚪	⚪	⚪
Phenyl Benzene	-	⚪	⚪	🟢	🟡	-	⚪	⚪	-
Phenyl Ether	⚪	⚪	⚪	🟢	⚪	⚪	⚪	⚪	⚪
Phenyl Hydrazine	⚪	⚪	⚪	🟢	🟡	⚪	⚪	⚪	⚪
Phosphine	⚪	🟡	🟢	🟢	🟡	⚪	⚪	⚪	-
Phosphoric Acid	-	⚪	🟡	🟢	🟢	🔴	⚪	⚪	🔴
Phosphoric Acid 45%	🔴	🟡	🟢	🟢	🟢	🟢	🟡	🟡	🟡
Phosphorous Trichloride	⚪	⚪	🟢	🟢	🟢	-	⚪	⚪	⚪
Photographic Developing Bath	-	🟢	🟡	🟢	🟢	🟢	🟢	🟢	🟢
Phthalic Acid	-	🟡	🟢	🟢	🟡	-	🟡	🟡	🟢
Phthalic Anhydride	-	-	🟢	🟢	-	-	-	-	-
Picoline, alpha	-	-	🟢	🟢	⚪	-	-	-	-
Picric Acid, Aqueous Solution	-	🟢	🟡	🟢	🟢	🟡	🟡	🟡	-
Pine Oil	🟢	⚪	⚪	🟢	🟢	🟢	🟡	🟡	⚪
Pineapple Juice	⚪	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢
Pinene	⚪	🟡	⚪	🟢	🟢	🟡	🟡	🟡	⚪
Piperidine	⚪	⚪	⚪	🟢	⚪	⚪	⚪	⚪	⚪
Polyvinyl Acetates	-	🟡	🟢	🟢	⚪	-	-	-	-
Potassium Acetate	⚪	🟡	🟢	🟢	🟡	⚪	🟡	🟡	⚪
Potassium Aluminium Sulfat	-	-	🟢	🟢	-	-	-	-	-
Potassium Bicarbonite	⚪	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟡
Potassium Bisulfate	⚪	🟡	🟢	🟢	🟢	🟡	🟢	🟢	🟡

🟢 Very good suitability 🟡 Good suitability 🔴 Limited suitability ⚪ Unsuitable

Chemical Compatibility Tables – **Series P** (Cont'd)

Chemical	ACM	CR	EPDM	FFKM	FKM	FVMQ	HNBR	NBR	VMQ
Potassium Borate	●	●	●	●	●	●	●	●	●
Potassium Bromate	●	●	●	●	●	●	●	●	●
Potassium Bromide	●	●	●	●	●	●	●	●	●
Potassium Carbonate	●	●	●	●	●	●	●	●	●
Potassium Chlorate	●	●	●	●	●	-	●	●	-
Potassium Chloride	●	●	●	●	●	●	●	●	●
Potassium Chromate	●	●	●	●	●	-	●	●	-
Potassium Cyanide	●	●	●	●	●	●	●	●	●
Potassium Dichromate	●	●	●	●	●	●	●	●	●
Potassium Hydroxide (Solution 50%)	●	●	●	●	●	●	●	●	●
Potassium Hydroxide, Potassium Lye	●	●	●	●	●	●	●	●	●
Potassium Hypochlorite (Javelle water)	●	-	●	●	●	●	●	●	●
Potassium Iodide	●	●	●	●	●	●	●	●	●
Potassium Nitrate	●	●	●	●	●	●	●	●	●
Potassium Perchlorate	●	●	●	●	●	-	●	●	-
Potassium Perfluoroacetate	-	●	●	●	●	●	●	●	-
Potassium Permanganate	●	●	●	●	●	●	●	●	●
Potassium Persulfate	●	●	●	●	●	●	●	●	●
Potassium Phosphate	-	-	●	●	●	-	●	●	●
Potassium Sulfate	●	●	●	●	●	●	●	●	●
Potassium Sulfite	●	●	●	●	●	●	●	●	●
Propane	●	●	●	●	●	●	●	●	●
Propanol	●	●	●	●	●	●	●	●	●

● Very good suitability ● Good suitability ● Limited suitability ● Unsuitable

Chemical Compatibility Tables – **Series P** (Cont'd)

Chemical	ACM	CR	EPDM	FFKM	FKM	FVMQ	HNBR	NBR	VMQ
2-Propanone (Acetone)	●	●	●	●	●	●	●	●	●
2-Propene-1-ol	●	●	●	●	●	●	●	●	●
Propinyl Alcohol	●	●	●	●	●	-	●	●	-
Propion Aldehyde	●	●	●	●	●	●	●	●	●
Propionic Acid	●	●	●	●	●	●	●	●	●
Propyl Acetate	●	●	●	●	●	●	●	●	●
Propyl Acetone	●	●	●	●	●	●	●	●	●
Propyl Amine	●	●	●	●	●	●	●	●	●
Propyl Nitrate	●	●	●	●	●	●	●	●	●
Propylene	●	●	●	●	●	●	●	●	●
Propylene Dichloride	-	-	●	●	-	-	●	●	●
Propylene Glycol	●	●	●	●	●	-	●	●	-
Propylene Oxide	●	●	●	●	●	●	●	●	●
Pyridine	●	●	●	●	●	●	●	●	●
Pyrrole	●	●	●	●	●	●	●	●	●

Chemical Compatibility Tables – **Series R**

Chemical	ACM	CR	EPDM	FFKM	FKM	FVMQ	HNBR	NBR	VMQ
Rapeseed Oil	●	●	●	●	●	●	●	●	●

● Very good suitability ● Good suitability ● Limited suitability ● Unsuitable

Chemical Compatibility Tables – Series S

Chemical	ACM	CR	EPDM	FFKM	FKM	FVMQ	HNBR	NBR	VMQ
Salicylic Acid	-	●	●	●	●	-	●	●	-
Sea Water	●	●	●	●	●	●	●	●	●
Sewage	-	●	●	●	●	●	●	●	●
Silcone grease	●	●	●	●	●	●	●	●	●
Silicic Acid	●	●	●	●	●	-	●	●	-
Silicon Dioxide	-	-	●	●	●	-	●	●	●
Silicone Oil	●	●	●	●	●	●	●	●	●
Silver Cyanide Solution	●	●	●	●	●	●	●	●	●
Silver Nitrate	●	●	●	●	●	●	●	●	●
Silver Salts	●	●	●	●	●	●	●	●	●
Skydrol 500	●	●	●	●	●	●	●	●	●
Skydrol 7000	●	●	●	●	●	●	●	●	●
Soap Solution	●	●	●	●	●	●	●	●	●
Soda (Sodium Carbonate)	●	●	●	●	●	●	●	●	●
Sodium Acetate	●	●	●	●	●	●	●	●	●
Sodium Benzoate	●	●	●	●	●	●	●	●	●
Sodium Bicarbonate Solution	●	●	●	●	●	●	●	●	●
Sodium Bisulfate Solution	●	●	●	●	●	●	●	●	●
Sodium Bisulfite Solution	●	●	●	●	●	●	●	●	●
Sodium Borate (Borax)	●	●	●	●	●	●	●	●	●
Sodium Carbonate (Soda Ash)	●	●	●	●	●	●	●	●	●
Sodium Carbonate Solution	-	●	●	●	●	●	●	●	●
Sodium Chlorate	●	●	●	●	●	●	●	●	●
Sodium Chloride (Common Salt)	●	●	●	●	●	●	●	●	●

● Very good suitability ● Good suitability ● Limited suitability ● Unsuitable

Chemical Compatibility Tables – **Series S** (Cont'd)

Chemical	ACM	CR	EPDM	FFKM	FKM	FVMQ	HNBR	NBR	VMQ
Sodium Chloride Solution	-	●	●	●	●	-	●	●	-
Sodium Chlorite	-	○	●	●	●	-	○	○	-
Sodium Cyanide Solution	-	●	●	●	-	-	◐	◐	●
Sodium Dichromate	○	●	●	●	●	-	◐	◐	◐
Sodium Fluoride	-	-	●	●	●	-	●	●	◐
Sodium Hydroxide	◯	◐	●	●	◯	◯	◐	◐	◯
Sodium Hydroxide, Caustic Soda	◐	◐	●	●	◐	◐	◐	◐	●
Sodium Hypochlorite Solution	○	◐	●	●	●	◐	◐	◐	◐
Sodium Nitrate	○	◐	●	●	●	●	◐	◐	◐
Sodium Nitrite	○	◐	●	●	●	○	○	○	○
Sodium Peroxide Solution	○	◐	●	●	●	●	◐	◐	○
Sodium Phosphate	-	◐	●	●	●	-	●	●	○
Sodium Silicate Solution	-	●	●	●	●	-	●	●	-
Sodium Sulfate Solution (Glauber's Salt)	○	◐	●	●	◐	◐	◐	◐	◐
Sodium Sulfhydrate Solution	○	●	●	●	●	●	●	●	●
Sodium Sulfide	○	◐	●	●	●	●	◐	◐	◐
Sodium Sulfite Solution	○	●	●	●	●	●	●	●	●
Sodium Tetraborate Solution	○	◐	●	●	●	●	◐	◐	◐
Sodium Thiosulfate (Antichlor)	-	●	●		●	-	◐	◐	-
Soy Bean Oil	◐	◐	○	●	●	●	●	●	◐
Sperm Oil	-	-	◐	●	●	-	●	●	-
Spermacetin	○	◐	○	●	●	○	●	●	○

● Very good suitability ◐ Good suitability ◯ Limited suitability ○ Unsuitable

Chemical Compatibility Tables – **Series S** (Cont'd)

Chemical	ACM	CR	EPDM	FFKM	FKM	FVMQ	HNBR	NBR	VMQ
Spirits	🟡	🟢	🟢	🟢	🟢	🟡	🟢	🟢	🟢
Stannic Chloride Solution	-	⚪	🟢	🟢	🟢	🟢	🟢	🟢	🟡
Starch	🟡	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢
Stearic Acid	🟢	🟡	🟡	🟢	🟢	🟢	🟡	🟡	🟡
Stoddard Solvent	🟢	🟡	⚪	🟢	🟢	🟢	🟢	🟢	⚪
Styrene	⚪	⚪	⚪	*	🟢	🔴	⚪	⚪	⚪
Succinic Acid	⚪	🟡	🟢	🟢	🟢	-	🟢	🟢	🟢
Sucrose Sap	⚪	🟡	🟢	🟢	🟢	🟢	🟢	🟢	🟢
Sugar Solutions	⚪	🟡	🟢	🟢	🟢	🟢	🟢	🟢	🟢
Sulfur	⚪	🟢	🟢	🟢	🟢	🟡	⚪	⚪	🟡
Sulfur Chloride	⚪	⚪	⚪	🟢	🟢	🟡	⚪	⚪	⚪
Sulfur Dioxide (SO2)	⚪	⚪	🟢	🟢	🟡	🟡	⚪	⚪	🟡
Sulfur Dioxide Liquid (anhydrous)	⚪	⚪	🟢	🟢	⚪	🟡	⚪	⚪	🟡
Sulfur Dioxide, gaseous	⚪	⚪	🟢	🟢	⚪	🟡	⚪	⚪	🟡
Sulfur Hexafluoride (SF6)	🟡	🟢	🟢	🟢	🟡	🟡	🟡	🟡	-
Sulfuric Acid (0 to 50%)	⚪	⚪	🟢/🟡	🟢	🟢/🟡	⚪	⚪	⚪	⚪
Sulfuric Acid, diluted	⚪	⚪	🟢	🟢	🟢	⚪	🟡	🟡	⚪
Sulfurous Acid	⚪	-	🟡	🟢	🟢	-	-	-	⚪

Chemical Compatibility Tables – **Series T**

Chemical	ACM	CR	EPDM	FFKM	FKM	FVMQ	HNBR	NBR	VMQ
Talcum	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢	🟢
Tallow	⚪	🟡	🟡	🟢	🟢	⚪	🟢	🟢	🟡

🟢 Very good suitability 🟡 Good suitability 🔴 Limited suitability ⚪ Unsuitable

Chemical Compatibility Tables – **Series T** (Cont'd)

Chemical	ACM	CR	EPDM	FFKM	FKM	FVMQ	HNBR	NBR	VMQ
Tannins	●	●	●	●	●	●	●	●	●
Tar	●	●	●	●	●	●	●	●	-
Tartaric Acid	●	●	●	●	●	●	●	●	●
Tetrachloroethane	●	●	●	●	●	●	●	●	●
Tetrachloromethane	-	●	●	●	●	●	●	●	●
Tetrachloroethylene	●	●	●	●	●	●	●	●	●
Tetrahydrofuran	●	●	●	●	●	●	●	●	●
Thionyl Chloride	●	●	●	●	●	●	●	●	●
Thiophene	●	●	●	●	●	●	●	●	●
Titanium Tetrachloride	●	●	●	●	●	●	●	●	●
Toluene (Toluol)	●	●	●	●	●	●	●	●	●
Transformer Oil	●	●	●	●	●	●	●	●	●
Tri-Iso-Propyl Benzene	●	●	●	●	●	-	●	●	●
Triacetin (Glycerine Triacetate)	●	●	●	●	●	●	●	●	●
Triaryl Phosphate	●	●	●	●	●	●	●	●	●
Tributoxy Ethyl Phosphate	●	●	●	●	●	-	●	●	●
Tributyl Marcaptane	●	●	●	●	●	●	●	●	●
Tributyl Phosphate	●	●	●	●	●	●	●	●	●
Trichloro Benzene	●	●	●	●	●	●	-	-	●
Trichloro Ethane	●	●	●/●	●	●	●	●	●	●
Trichloro Ethyl Phosphate	-	●	-	●	●	-	●	●	-
Trichloro Ethylene	●	●	●/●	●	●	●	●	●	●
Trichloroacetic Acid	●	●	●	●	●	●	●	●	●
Tricresyl Phosphate	●	●	●	●	●	●	●	●	●
Triethanolamine	●	-	●	●	-	-	-	-	●
Triethyl Borane	-	-	-	●	●	-	-	-	-

● Very good suitability ● Good suitability ● Limited suitability ● Unsuitable

Chemical Compatibility Tables – **Series T** (Cont'd)

Chemical	ACM	CR	EPDM	FFKM	FKM	FVMQ	HNBR	NBR	VMQ
Triethyl Glycol	●	-	●	●	●	-	●	●	●
Triethylaluminium	-	-	○	●	◐	-	-	-	-
Trifluoro Ethane	○	○	○	●	●	◐	○	○	○
Trinitrotoluene (TNT)	○	◐	○	●	◐	◐	○	○	-
Trioctyl Phosphate	○	○	●	●	◐	◐	○	○	○
Trisodium Phosphate Solution	●	◐	●	●	●	●	●	●	●
Turpentine	◐	○	○	●	●	●	●	●	○

Chemical Compatibility Tables – **Series U**

Chemical	ACM	CR	EPDM	FFKM	FKM	FVMQ	HNBR	NBR	VMQ
Urea	◐	◐	●	●	●	●	●	●	●

Chemical Compatibility Tables – **Series V**

Chemical	ACM	CR	EPDM	FFKM	FKM	FVMQ	HNBR	NBR	VMQ
Vaseline	◐	◐	○	●	●	●	●	●	◐
Vaseline Oil	○	◐	○	●	●	◐	●	●	◐
Vegetable Juices	○	◐	●	●	●	●	●	●	●
Vegetable Oils	◐	◐	○	●	●	●	●	●	◐
Vinegar	○	◐	●	●	◐	◐	◐	◐	●

● Very good suitability ◐ Good suitability ● Limited suitability ○ Unsuitable

Chemical Compatibility Tables – **Series V** (Cont'd)

Chemical	ACM	CR	EPDM	FFKM	FKM	FVMQ	HNBR	NBR	VMQ
Vinyl Acetate	-	-	-	●	-	-	-	-	-
Vinyl Chloride, liquid	-	-	-	●	-	-	-	-	-
Vinylidene Chloride	○	○	○	●	◐	○	○	○	○

Chemical Compatibility Tables – **Series W**

Chemical	ACM	CR	EPDM	FFKM	FKM	FVMQ	HNBR	NBR	VMQ
Waste Gas (cont. Carbon Dioxide)	●	●	●	●	●	●	●	●	●
Waste Gas (cont. Carbon Monoxide)	●	●	●	●	●	●	●	●	●
Waste Gas (cont. Hydrogen Chloride)	-	●	●	●	●	-	◐	◐	-
Waste Gas (cont. Hydrogen Fluoride)	-	●	●	●	●	-	●	●	●
Waste Gas (cont. Nitrous Fumes)	○	●	●	●	●	◐	-	-	○
Waste Gas (cont. Sulfur Dioxide)	-	●	●	●	●	-	◐	◐	-
Waste Gas (cont. Sulfuric Acid)	-	◐	●	●	●	-	○	○	-
Water steam < +150 °C / +302 °F	○	○	●	●	○	◐	○	○	◐
Water steam > +150 °C / +302 °F	○	○	◐	●	○	○	○	○	○

● Very good suitability ◐ Good suitability ● Limited suitability ○ Unsuitable

Chemical Compatibility Tables – **Series W** (Cont'd)

Chemical	ACM	CR	EPDM	FFKM	FKM	FVMQ	HNBR	NBR	VMQ
Water to +80 °C / +176 °F	●	●	●	●	●	●	●	●	●
Water to +135 °C / +275 °F	●	●	●	●	●	●	●	●	●
Water vapour < +140 °C / +284 °F	●	●	●	●	●	●	●	●	●
Water vapour > +140 °C / +284 °F	●	●	●	●	●	●	●	●	●
Wax Alcohols	●	●	●	●	●	-	●	●	●
Wine + Whiskey	●	●	●	●	●	●	●	●	●
Wood Spirit	●	●	●	●	●	●	●	●	●

Chemical Compatibility Tables – **Series X**

Chemical	ACM	CR	EPDM	FFKM	FKM	FVMQ	HNBR	NBR	VMQ
Xenon	●	●	●	●	●	●	●	●	●
Xylene (Xylol)	●	●	●	●	●	●	●	●	●
Xylidines (aromatic Amines)	●	●	●	●	●	●	●	●	●

Chemical Compatibility Tables – **Series Y**

Chemical	ACM	CR	EPDM	FFKM	FKM	FVMQ	HNBR	NBR	VMQ
Yeast	●	●	●	●	●	●	●	●	●

● Very good suitability ● Good suitability ● Limited suitability ● Unsuitable

Chemical Compatibility Tables – **Series Z**

Chemical	ACM	CR	EPDM	FFKM	FKM	FVMQ	HNBR	NBR	VMQ
Zeolites	-	●	●	●	●	-	●	●	-
Zinc Acetate	●	●	●	●	●	●	●	●	●
Zinc Chloride Solutions	●	●	●	●	●	●	●	●	-
Zinc Sulfate	●	●	●	●	●	●	●	●	●

● Very good suitability ● Good suitability ● Limited suitability ● Unsuitable

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