

ISOLAST® perfluoroelastomer seals

Chemical Compatibility Guide



Edition November 2001





ISOLAST[®] perfluoroelastomer seals

Chemical Compatibility Guide



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■ Introduction

Isolast[®] perfluoroelastomer seals are manufactured from perfluoroelastomer compounds offering almost universal chemical resistance, similar to PTFE. They exhibit low swell in virtually all media. Isolast[®] perfluoroelastomer seals have excellent resilience and compression set characteristics which are retained at elevated temperatures. The combination of these properties provides prolonged seal life in the most demanding of applications.

Isolast[®] perfluoroelastomer seals are available in a range of compounds to suit the most demanding applications in the Chemical Processing Industry, Semiconductor Manufacture and Oil Exploration.

Isolast[®] J 9503 seals are manufactured from a general purpose compound suitable for most applications in the Chemical Processing Industry in the temperature range -25°C to +240°C. Isolast[®] J 9503 seals offer outstanding resistance to most acids, ketones, esters, solvents, amines, hot water/steam, ethylene and propylene oxide.

For temperatures in excess of +240°C and up to +325°C, Isolast[®] 8325 is the preferred grade. Isolast[®] 8325 shows excellent general chemical resistance and low swelling properties in organic and inorganic acids, aldehydes and ketones. It has outstanding hot air aging properties. This grade is not recommended in hot water/steam and aliphatic amines applications at higher temperatures. It should never be used in applications involving ethylene and propylene oxide.

Please refer to the guide carefully for selection of the preferred grade.

Using this Guide

All elastomer products are made from a basic elastomeric polymer compounded with fillers, additives and curing agents.

The formulation is chosen to provide the best balance of properties for each application. We have developed thousands of compounds to provide our customers with sealing solutions across a broad range of industries. Our world leading expertise has been applied to the compounds used for Isolast[®] seals.

The effect of immersion in a fluid on an elastomer is largely dependant on the base polymer. Reaction with the fillers, additives and curing agents is normally of lower significance. However in certain media the possibility of a reaction has to be considered.

Isolast[®] perfluoroelastomer parts should always be tested for suitability when used in fluids containing high concentrations of some diamines, nitric acid and basic phenols at temperatures in excess of 100°C.

It is important to recognize when using this guide that the ratings shown are based on published data and immersion tests. These tests are conducted under laboratory conditions, and may not represent adequately the conditions in the field.

Relative short term laboratory tests may not pick up all the additives and impurities which may exist in long term service applications. However, Isolast[®] perfluoroelastomer parts, with their outstanding chemical resistance, are most likely to provide excellent service life.

Care must be taken to ensure that all aspects of the application are considered carefully before a material is selected. For example at elevated temperatures some aggressive fluids can cause a much marked effect on an elastomer than at room temperature.

Physical properties as well as fluid compatibility need to be considered. Compression set, hardness, abrasion resistance and thermal expansion can influence the suitability of a material for a particular application.

It is recommended that users conduct their own tests to confirm the suitability of Isolast[®] perfluoroelastomer seals for each application. Our experienced technical staff can be consulted for further information on specific applications.

Ratings are shown for four other commonly used elastomers: Ethylene-Propylene-Dien (EPDM), Silicon (VMQ), Fluorosilicon (FVMQ) and fluorocarbon (FKM). These have been included primarily for comparison and reflect the performance of typical compounds. In practice the performance of actual compounds may differ substantially from what is shown here. Ratings published here for these elastomers should not be used as the basis for choice in any application.

If an elastomer is to be used in contact with foodstuffs or beverages users should confirm that the elastomer complies with any statutory regulations that might apply. For medical and pharmaceutical applications it is also important that direct advice is gained from the manufacturer. In no circumstances should Isolast[®] perfluoroelastomer parts be used for implants in the human body.



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In this Chemical Compatibility Guide, all listings for Isolast[®] grades is based on standard compound J9503 for the majority of chemical media. In case that the rating does not recommend a specific compound, any Isolast[®] compound may be selected.

Rating System

- A: Elastomer shows little or no effect from exposure. Swell likely to be less than 10%, slight loss of physical properties. Little effect on performance.
- B: Some effect from exposure with swell up to 20% and some loss of physical properties. Isolast[®] perfluoroelastomer seals will often perform satisfactorily under these conditions.
- C: Significant swell and loss of physical properties after exposure. Limited performance would be expected in application. Actual service life/performance to be determined by testing.
- U: Elastomer is unsuitable for application in this media.
- : Insufficient information available for service in this media.

Caution

As any fluorinated product, Isolast[®] perfluoroelastomer parts should not be exposed to molten or gaseous alkali metals, such as sodium or potassium, since a violent exothermic reaction may occur.

Certain metals, e. g. Vanadium, Niobium and Tantalum, behave as a catalyst to perfluoroelastomers and tend to cause depolymerisation. Please consult our technical staff.

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A

Chemical	Isolast [®]	EPDM	VMQ	FVMQ	FKM
Abietic Acid	A	-	-	-	-
Acetaldehyde	A	A	B	U	U
Acetamide	A	A	B	A	B
Acetanilide	A	-	-	-	-
Acetic Acid Vapor	A	A	U	U	U
Acetic Acid, 30 %	A	A	A	B	B
Acetic Acid, Glacial	A 8325	A	B	U	C
Acetic Anhydride	A	B	C	U	U
Acetoacetic Acid	A	-	-	-	-
Acetone	A	A	C	U	U
Acetone Cyanohydrin	A	-	-	-	-
Acetonitrile	A	A	-	-	-
Acetophenetidine	A	-	-	-	-
Acetophenone	A	A	U	U	U
Acetotoluidine	A	-	-	-	-
Acetyl Bromide	A	-	-	-	-
Acetyl Chloride	A	U	C	A	A
Acetylacetone	A	-	-	-	-
Acetylene	A	A	B	-	A
Acetylene Tetrabromide	A	-	-	-	-
Acetylene Tetrachloride	A	-	-	-	-
Acetylsalicylic Acid	A	-	-	-	-
Acids, Non-Organic	A	A	-	-	A
Acids, Organic	A	A	-	-	A
Acridine	A	-	-	-	-
Acrolein	A	A	U	U	U
Acrylic Acid	A	-	-	-	-
Acrylonitrile	A 9503	U	U	U	C
Adipic Acid	A 8325	A	-	A	-
Aero safe 2300	A	A	U	U	U
Aero safe 2300 W	A	A	U	U	U
Aero Shell 1 AC Lubricant	A	U	B	A	A
Aero Shell 17 Lubricant	A	U	B	A	A
Aero Shell 7 A Lubricant	A	U	B	A	A
Aero Shell 750	A	U	U	B	A
Alkanesulphonic Acid	A	-	-	-	-
Alkyl Acetone	A	-	-	-	-
Alkyl Alcohol	A	-	-	-	-
Alkyl Amine	A 9503	-	-	-	-
Alkyl Aryl Sulphonates	A	-	-	-	-
Alkyl Benzene	A	-	-	-	-
Alkyl Chloride	A	-	-	-	-
Alkyl Sulphide	A	-	-	-	-

Chemical	Isolast [®]	EPDM	VMQ	FVMQ	FKM
Aluminum Acetate	A	A	U	U	U
Aluminum Bromide	A	-	-	-	-
Aluminum Chlorate	A	-	-	-	-
Aluminum Chloride	A	A	B	A	A
Aluminum Ethylate	A	-	-	-	-
Aluminum Fluoride	A	A	B	A	A
Aluminum Fluorsilicate	A	-	-	-	-
Aluminum Formate	A	-	-	-	-
Aluminum Hydroxide	A	-	-	-	-
Aluminum Linoleate	A	-	-	-	-
Aluminum Nitrate	A	A	B	-	A
Aluminum Oxalate	A	-	-	-	-
Aluminum Phosphate	A	A	A	-	A
Aluminum Potassium Sulphate	A	-	-	-	-
Aluminum Salts	A	-	-	-	-
Aluminum Sodium Sulphate	A	-	-	-	-
Aluminum Sulphate	A	A	A	A	A
Alums	A	-	-	-	-
Ambrex 33 (Mobile)	A	U	U	U	A
Ambrex 830 (Mobile)	A	U	B	A	A
Amines	A 9503	-	-	U	U
Amino Phenol	A 9503	-	-	-	-
Aminoanthraquinone	A	-	-	-	-
Aminoazobenzene	A	-	-	-	-
Aminobenzene sulfonic acid	A	-	-	-	-
Aminobenzoic Acid	A	-	-	-	-
Aminoethylethanolamine	A 9503	-	-	-	-
Aminopyridine	A	-	-	-	-
Aminosalicylic Acid	A	-	-	-	A
Ammonia Gas (cold)	A	A	A	U	U
Ammonia Gas (hot)	A 9503	B	A	U	U
Ammonia, Anhydrous	A 9503	A	C	U	U
Ammonium	A	-	-	-	-
Ammonium Acetate	A	-	-	-	-
Ammonium Arsenate	A	-	-	-	-
Ammonium Benzoate	A	-	-	-	-
Ammonium Bicarbonate	A	-	-	-	-
Ammonium Bifluoride	A 9503	-	-	-	-
Ammonium Bisulfite	A	-	-	-	-
Ammonium Bromide	A	-	-	-	-
Ammonium Carbamate	A	-	-	-	-
Ammonium Carbonate	A	-	-	-	-
Ammonium Chloride	A	A	-	-	A



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Chemical	Isolast [®]	EPDM	VMQ	FVMQ	FKM
Ammonium Citrate	A	-	-	-	-
Ammonium Dichromate	A	-	-	-	-
Ammonium Diphosphate	A	-	-	-	-
Ammonium Fluoride	A 9503	-	-	-	-
Ammonium Fluorosilicate	A	-	-	-	-
Ammonium Formate	A	-	-	-	-
Ammonium Hydrogen Fluoride	A 9503	-	-	-	-
Ammonium Hydroxide	A 9503	A	A	B	B
Ammonium Iodide	A	-	-	-	-
Ammonium Lactate	A	-	-	-	-
Ammonium Molybdate	A	-	-	-	-
Ammonium Nitrate	A	A	-	-	-
Ammonium Nitrite	A	A	B	-	-
Ammonium Oxalate	A	-	-	-	-
Ammonium Perchlorate	A	-	-	-	-
Ammonium Perchloride	A	-	-	-	-
Ammonium Persulphate	A	A	-	-	-
Ammonium Phosphate	A	A	A	-	-
Ammonium Phosphite	A	-	-	-	-
Ammonium Picrate	A	-	-	-	-
Ammonium Polysulphide	A	-	-	-	-
Ammonium Salicylate	A	-	-	-	-
Ammonium Salts	A	-	-	-	-
Ammonium Sulphamate	A	-	-	-	-
Ammonium Sulphate	A	A	-	-	U
Ammonium Sulphate Nitrate	A	-	-	-	-
Ammonium Sulphide	A	-	-	-	-
Ammonium Sulphite	A	-	-	-	-
Ammonium Thiocyanate	A	-	-	-	-
Ammonium Thioglyllolate	A	-	-	-	-
Ammonium Thiosulphate	A	-	-	-	-
Ammonium Tungstate	A	-	-	-	-
Ammonium Valerate	A	-	-	-	-
Amyl Acetate	A	C	U	U	U
Amyl Alcohol	A	A	U	A	B
Amyl Borate	A	U	-	-	A
Amyl Butyrate	A	-	-	-	-
Amyl Chloride	A	-	-	-	-
Amyl Chloronaphthalene	A	U	U	B	A
Amyl Cinnamic Aldehyde	A	-	-	-	-
Amyl Laurate	A	-	-	-	-
Amyl Mercaptan	A	-	-	-	-
Amyl Naphthalene	A	U	U	A	A
Amyl Nitrate	A	-	-	-	-
Amyl Nitrite	A	-	-	-	-

Chemical	Isolast [®]	EPDM	VMQ	FVMQ	FKM
Amyl Phenol	A	-	-	-	-
Amyl Propionate	A	-	-	-	-
Anderol L-774	A	-	-	-	-
Aniline	A	A	U	C	C
Aniline Dyes	A	A	C	B	B
Aniline Hydrochloride	A	B	U	B	B
Aniline Hydrochlorine	A	B	B	B	B
Aniline Sulphate	A	-	-	-	-
Aniline Sulphite	A	-	-	-	-
Animal Fats	A	B	B	A	A
Animal Oils	A	-	-	-	-
Anisole	A	-	-	-	-
Anisoyl Chloride	A	-	-	-	-
Ansul's Ether 161 or 181	A	C	U	C	U
Anthracene	A	-	-	-	-
Anthranilic Acid	A	-	-	-	-
Anthraquinone	A	-	-	-	-
Antifreeze Solutions	A	-	-	-	-
Antimony Chloride	A	-	-	-	-
Antimony Pentachloride	A	-	-	-	-
Antimony Pentafluoride	B	-	-	-	-
Antimony Sulphate	A	-	-	-	-
Antimony Tribromide	A	-	-	-	-
Antimony Trichloride	A	-	-	-	-
Antimony Trifluoride	B	-	-	-	-
Antimony Trioxide	A	-	-	-	-
Aqua Regia	A	U	U	U	U
Arachidic Acid	A	-	-	-	-
Argon	A	A	A	A	A
Arochlor, 1248	A	C	B	B	A
Arochlor, 1254	A	C	C	B	A
Arochlor, 1260	A	A	B	A	A
Aromatic Fuels	A	U	U	A	A
Arsenic Acid	A	A	A	A	A
Arsenic Oxide	A	-	-	-	-
Arsenic Trichloride	A	C	-	-	-
Arsenic Trioxide	A	-	-	-	-
Arsenic Trisulphide	A	-	-	-	-
Arsenites	A	-	-	-	-
Arsine	A	-	-	-	-
Aryl Orthosilicate	A	-	-	-	-
Ascorbic Acid	A	-	-	-	-
Askarel	A	U	U	B	A
Aspartic Acid	A	-	-	-	-
Asphalt	A	U	U	B	A

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Chemical	Isolast®	EPDM	VMQ	FVMQ	FKM
Asphalt, Emulsion	A	U	U	B	A
ASTM Oil, No. 1	A	U	-	B	A
ASTM Oil, No. 2	A	U	A	A	A
ASTM Oil, No. 3	A	U	B	A	A
ASTM Oil, No. 4	A	U	B	A	A
ASTM Ref. Fuel A	A	U	-	A	A
ASTM Ref. Fuel B	A	U	-	A	A
ASTM Ref. Fuel C	A	U	-	B	A
Atlantic Dominion F	A	-	-	-	-
Atlantic Utro Lube	A	-	-	-	-
Aurex 256	A	-	-	-	-
Aurex 903R (Mobil)	A	-	-	-	-
Axarel 9100	A	-	-	-	-
Azobenzene	A	-	-	-	-

B

Chemical	Isolast®	EPDM	VMQ	FVMQ	FKM
Barium Carbonate	A	A	A	A	A
Barium Chlorate	A	A	A	A	A
Barium Chloride	A	A	A	A	A
Barium Cyanide	A	A	A	A	A
Barium Hydroxide	A	A	A	A	A
Barium Iodide	A	A	A	A	A
Barium Nitrate	A	A	A	A	A
Barium Oxide	A	A	A	A	A
Barium Peroxide	A	A	A	A	A
Barium Polysulphide	A	A	A	A	A
Barium Salts	A	A	A	A	A
Barium Sulphate	A	A	A	A	A
Barium Sulphide	A	A	A	A	A
Battery Acid	A	A	U	U	A
Bayrol 35	A	-	-	-	A
Bayrol D	A	-	-	-	A
Beer	A	A	A	A	A
Benzaldehyde	A	B	B	C	U
Benzaldehydedisulphonic Acid	A	-	-	-	-
Benzamide	A	-	-	-	-
Benzanthrone	A	-	-	-	-
Benzene	A	U	U	C	A
Benzene Hexachloride	A	-	-	-	-
Benzene Sulphonic Acid	A	C	U	B	A
Benzidine	A	-	-	-	-
Benzidine 3 Sulphonic Acid	A	-	-	-	-

Chemical	Isolast®	EPDM	VMQ	FVMQ	FKM
Benzil	A	-	-	-	-
Benzilic Acid	A	-	-	-	-
Benzine (Ligroin)	A	U	U	A	A
Benzoic Acid	A	C	C	B	A
Benzoin	A	-	-	-	-
Benzonitrile	A	-	-	-	-
Benzophenone	A	-	-	-	-
Benzoquinone	A	-	-	-	-
Benzotrachloride	A	-	-	-	-
Benzotrifluoride	A	-	-	-	-
Benzoyl Chloride	A	U	-	B	A
Benzoyl Peroxide	A	-	-	-	-
Benzoylsulphonilic Acid	A	-	-	-	-
Benzyl Acetate	A	-	-	-	-
Benzyl Alcohol	A	B	B	B	A
Benzyl Amine	A 9503	-	-	-	-
Benzyl Benzoate	A	B	-	A	A
Benzyl Bromide	A	-	-	-	-
Benzyl Butyl Phthalate	A	-	-	-	-
Benzyl Chloride	A	U	U	B	A
Benzyl Phenol	A	-	-	-	-
Benzyl Salicylate	A	-	-	-	-
Beryllium Chloride	A	-	-	-	-
Beryllium Fluoride	A	-	-	-	-
Beryllium Oxide	A	-	-	-	-
Beryllium Sulphate	A	-	-	-	-
Bismuth Carbonate	A	A	-	-	-
Bismuth Nitrate	A	A	-	-	-
Bismuth Oxychloride	A	A	-	-	-
Black leach	A	B	U	U	B
Blast Furnace Gas	A	U	A	B	A
Bleach Solutions	A	A	B	B	A
Boiler Feed Water	A	A	C	B	B
Borax Solution	A	A	B	B	A
Bordeaux Mixture	A	A	B	B	A
Boric Acid	A	A	A	A	A
Boric Oxide	A	-	-	-	-
Borneol	A	-	-	-	-
Bornyl Acetate	A	-	-	-	-
Bornyl Chloride	A	-	-	-	-
Bornyl Formate	A	-	-	-	-
Boron Hydride	A	-	-	-	-
Boron Phosphate	A	-	-	-	-
Boron Tribromide	A	-	-	-	-
Boron Trichloride	A	-	-	-	-



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Chemical	Isolast®	EPDM	VMQ	FVMQ	FKM
Boron Trifluoride	A	-	-	-	-
Boron Trioxide	A	-	-	-	-
Brine	A	A	A	A	A
Bromide Acid	A	-	-	-	-
Bromine	A	U	U	B	B
Bromine Pentafluoride	C 9503	U	U	U	U
Bromine Trifluoride	B	U	U	U	U
Bromine vapour	A	U	U	B	B
Bromine Water	A	B	U	B	A
Bromine, Anhydrous	A	U	U	B	A
Bromobenzene	A	U	U	A	A
Bromochloro-trifluoroethane	A	-	-	-	-
Bromoform	A	-	-	-	-
Bromomethane	A	-	-	-	-
Bromotrifluoromethan (FREON 13B1)	B	-	-	-	-
Brucine Sulphate	A	-	-	-	-
Bunker "C" (Fuel Oil)	A	U	B	A	A
Butadiene	A	C	U	B	A
Butane	A	U	U	A	A
Butanediol	A	-	-	-	-
Butyl Acetate	A	C	U	U	U
Butyl Acetyl Ricinoleate	A	A	-	B	A
Butyl Acrylate	A	U	-	U	U
Butyl Alcohol	A	B	B	B	A
Butyl Amine	A 9503	B	U	U	U
Butyl Benzoate	A	B	-	A	A
Butyl Butyrate	A	-	-	-	-
Butyl Carbitol	A	A	U	U	-
Butyl Cellosolve	A	A	-	U	U
Butyl Cellosolve Acetate	A	-	-	-	-
Butyl Ether	A	U	U	U	U
Butyl Glycolate	A	-	-	-	-
Butyl Lactate	A	-	-	-	-
Butyl Laurate	A	-	-	-	-
Butyl Mercaptan	A	U	U	U	A
Butyl Methacrylate	A	-	-	-	-
Butyl Oleate	A	B	-	B	A
Butyl Oxalate	A	-	-	-	-
Butyl Phenols	A	U	U	U	B
Butyl Stearate	A	C	-	B	A
Butylbenzoic Acid	A	-	-	-	-
Butylchloride	A	-	-	-	-
Butylene	A	U	U	B	A
Butyraldehyde	A 9503	B	U	U	U
Butyric Acid	A	U	U	B	A

Chemical	Isolast®	EPDM	VMQ	FVMQ	FKM
Butyric Anhydride	A	-	-	-	-
Butyrolactone	A	-	-	-	-
Butyryl Chloride	A	A	A	A	A

C

Chemical	Isolast®	EPDM	VMQ	FVMQ	FKM
Cadmium Chloride	A	A	A	A	A
Cadmium Cyanide	A	A	A	A	A
Cadmium Nitrate	A	A	A	A	A
Cadmium Oxide	A	A	A	A	A
Cadmium Sulphate	A	A	A	A	A
Cadmium Sulphide	A	A	A	A	A
Calcium Acetate	A	A	U	U	U
Calcium Arsenate	A	-	-	-	-
Calcium Benzoate	A	A	A	A	A
Calcium Bicarbonate	A	A	A	A	A
Calcium Bisulphide	A	A	A	A	A
Calcium Bisulphite	A	A	A	A	A
Calcium Bromide	A	A	A	A	A
Calcium Carbide	A	-	-	-	-
Calcium Carbonate	A	A	A	A	A
Calcium Chlorate	A	-	-	-	-
Calcium Chloride	A	A	A	A	A
Calcium Chromate	A	-	-	-	-
Calcium Cyanamide	A	-	-	-	-
Calcium Cyanide	A	A	A	A	A
Calcium Fluoride	A	A	A	A	A
Calcium Gluconate	A	-	-	-	-
Calcium Hydride	A	-	-	-	-
Calcium Hydrosulphide	A	-	-	-	-
Calcium Hydroxide	A	A	A	A	A
Calcium Hypochlorite	A	A	B	B	A
Calcium Hypophosphite	A	-	-	-	-
Calcium Lactate	A	A	A	A	A
Calcium Naphthenate	A	A	A	A	A
Calcium Nitrate	A	A	B	A	A
Calcium Oxide	A	-	-	-	-
Calcium Oxlate	A	-	-	-	-
Calcium Permanganate	A	-	-	-	-
Calcium Peroxide	A	-	-	-	-
Calcium Phenolsulphonate	A	-	-	-	-
Calcium Phosphate	A	A	A	A	A
Calcium Propionate	A	A	A	A	A

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Chemical	Isolast [®]	EPDM	VMQ	FVMQ	FKM
Calcium Pyridine Sulphonate	A	A	A	A	A
Calcium Salts	A	A	A	A	A
Calcium Stearate	A	A	A	A	A
Calcium Sulphamate	A	A	A	A	A
Calcium Sulphate	A	A	A	A	A
Calcium Sulphide	A	A	B	A	A
Calcium Sulphite	A	A	A	A	A
Calcium Thiocyanate	A	A	A	A	A
Calcium Tungstate	A	A	A	A	A
Caliche	A	-	-	-	-
Camphene	A	-	-	-	-
Camphor	A	U	U	U	B
Camphoric Acid	A	-	-	-	-
Cane Sugar Liquors	A	A	A	A	A
Capric Acid	A	-	-	-	-
Caproic Acid	A	-	-	-	-
Caproic Aldehyde	A	-	-	-	-
Caprolactam	A	-	-	-	-
Carbamate	A	B	-	A	A
Carbazole	A	-	-	-	-
Carbitol	A	B	B	B	B
Carbolic Acid (Phenol)	A	B	U	A	A
Carbon Dioxide	A	B	B	A	A
Carbon Disulphide	A	U	U	C	A
Carbon Monoxide	A	A	A	B	A
Carbon Tetrabromide	A	-	-	-	-
Carbon Tetrachloride	A	U	U	C	A
Carbon Tetrafluoride	B	-	-	-	-
Carbonic Acids	A	A	A	A	A
Casein	A	A	A	A	A
Castor Oil	A	B	A	A	A
Cellosolve	A	B	U	U	C
Cellosolve Acetate	A	B	U	U	U
Cellulose Acetate	A	B	A	U	U
Cellulose Acetobutyrate	A	-	-	-	-
Cellulose Ether	A	-	-	-	-
Cellulose Nitrate	A	-	-	-	-
Cellulose Tripropionate	A	-	-	-	-
Cellulube A80, now Fyrquel	A	A	A	C	A
Cerium Sulphate	A	-	-	-	-
Cerous Chloride	A	-	-	-	-
Cerous Fluoride	A	-	-	-	-
Cerous Nitrate	A	-	-	-	-
Cetane (Hexadecane)	A	-	-	-	-
Cetyl Alcohol	A	A	-	-	-

Chemical	Isolast [®]	EPDM	VMQ	FVMQ	FKM
Chaulmoogric Acid	A	-	-	-	-
China Wood Oil (Tung Oil)	A	C	U	B	A
Chloral	A	-	-	-	-
Chloramine	A	-	-	-	-
Chloranthraquinone	A	-	-	-	-
Chlordane	A	-	-	-	-
Chloric Acid	A	-	-	-	C
Chlorinated Solvents	A	-	-	-	-
Chlorine (Dry)	A	U	U	A	A
Chlorine (Wet)	B	C	U	B	B
Chlorine Dioxide	B	U	U	B	B
Chlorine Trifluoride	B	U	U	C	U
Chlorine, Solution in Water	A	B	U	U	A
Chloro-1-Nitro Ethane	A	U	U	U	U
Chloro Xylenols	A	-	-	-	-
Chloroacetaldehyde	B	A	U	C	U
Chloroacetic Acid	A	A	-	U	U
Chloroacetone	A	A	U	U	U
Chloroacetyl Chloride	A	-	-	-	-
Chloroamino Benzoic Acid	A	-	-	-	-
Chloroaniline	A	-	-	-	-
Chlorobenzaldehyde	A	-	-	-	-
Chlorobenzene	A	U	U	B	A
Chlorobenzochloride	A	-	-	-	-
Chlorobenzotrifluoride	A	-	-	-	-
Chlorobromomethane	A	B	U	B	A
Chlorobromopropane	A	-	-	-	-
Chlorobutadiene	A	U	U	B	A
Chlorodifluoromethane (FREON 22)	B	-	-	-	-
Chlorododecane	A	U	U	A	A
Chloroethane	A	B	U	A	B
Chloroethylbenzene	A	-	-	-	-
Chloroform	A	U	U	U	A
Chlorohydrin	A	-	-	-	-
Chloronitrobenzene	A	-	-	-	-
Chloropentafluoroethane (FREON 115)	B	-	-	-	-
Chlorophenol	A	-	-	-	-
Chloropicrin	A	-	-	-	-
Chloroprene	A	-	-	-	-
Chlorosilanes	A	-	-	-	-
Chlorosulphonic Acid	A	U	U	U	U
Chlorotoluene	A	U	U	B	A
Chlorotoluene Sulphonic Acid	A	-	-	-	-
Chlorotoluidine	A	-	-	-	-
Chlorotrifluoroethylene	B	-	-	-	-



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Chemical Compatibility Guide

Chemical	Isolast®	EPDM	VMQ	FVMQ	FKM
Chlorotrifluoromethane (FREON B)	B	-	-	-	-
Chloroxylols	A	-	-	-	-
Cholesterol	A	-	-	-	-
Chrome Alum	A	-	-	-	-
Chromic Acid	A	C	C	C	A
Chromic Chloride	A	-	-	-	-
Chromic Fluoride	A	-	-	-	-
Chromic Hydroxide	A	-	-	-	-
Chromic Nitrates	A	-	-	-	-
Chromic Oxide	A	-	-	-	-
Chromic Phosphate	A	-	-	-	-
Chromic Sulphate	A	-	-	-	-
Chromyl Chlorides	A	-	-	-	-
Cinnamic Acid	A	A	-	-	-
Cinnamic Alcohol	A	-	-	-	-
Cinnamic Aldehyde	A	-	-	-	-
Citric Acid	A	A	A	A	A
Clorox	A	B	B	B	A
Coal Tar	A	U	U	A	A
Cobaltous Acetate	A	A	-	-	A
Cobaltous Bromide	A	A	-	-	A
Cobaltous Chloride	A	A	B	A	A
Cobaltous Linoleate	A	A	-	-	A
Cobaltous Naphthenate	A	A	-	-	A
Cobaltous Sulphate	A	A	-	-	A
Coca-Cola	A	A	A	A	B
Coconut Oil	A	C	A	A	A
Cod Liver Oil	A	A	B	A	A
Coke Oven Gas	A	U	B	B	A
Copper Acetate	A	A	U	U	U
Copper Ammonium Acetate	A	-	-	-	-
Copper Carbonate	A	-	-	-	-
Copper Chloride	A	A	A	A	A
Copper Cyanide	A	A	A	A	A
Copper Gluconate	A	-	-	-	-
Copper Naphthenate	A	-	-	-	-
Copper Nitrate	A	A	-	-	A
Copper Oxide	A	-	-	-	-
Copper Salts	A	A	-	-	A
Copper Sulfate	A	A	A	A	A
Corn Oil	A	C	A	A	A
Cottonseed Oil	A	B	A	A	A
Cresol (Methyl Phenol)	A	U	U	B	A
Cresylic Acid	A	U	U	B	A
Crotonaldehyde	A	-	-	-	-

Chemical	Isolast®	EPDM	VMQ	FVMQ	FKM
Crotonic Acid	A	-	-	-	-
Crude Oil	A	U	U	A	A
Cumaldehyde	A	-	-	-	-
Cumene (Isopropylbenzene)	A	U	U	B	A
Cumene Hydroperoxide	A	-	-	-	-
Cutting Oils	A	-	-	-	-
Cyanamide	A	-	-	-	-
Cyanides	A	A	-	-	-
Cyanoacetic Acid	A 9503	-	-	-	-
Cyanogen Chloride	A	-	-	-	-
Cyanohydrin	A	-	-	-	-
Cyanuric Chloride	A	-	-	-	-
Cyclohexane	A	U	U	B	A
Cyclohexanol	A	C	U	A	A
Cyclohexanone	A	B	U	U	U
Cyclohexene	A	-	-	-	-
Cyclohexylamine	A 9503	C	U	U	U
Cyclohexylaminecarbonat	A 9503	-	-	-	-
Cyclohexylaminelaurat	A 9503	-	-	-	-
Cyclopentadiene	A	-	-	-	-
Cyclopentane	A	-	-	-	-
Cyclopolyolefins	A	-	-	-	-

D

Chemical	Isolast®	EPDM	VMQ	FVMQ	FKM
Decalin	A	U	U	A	A
Decane	A	U	B	A	A
Deionized Water	A	-	-	-	-
Denatured Alcohol	A	A	A	A	A
Detergent Solutions	A	A	A	A	A
Developing Fluids	A	B	A	A	A
Dextrin	A	A	A	A	A
Dextro Lactic Acid	A	-	-	-	-
Dextrose	A	-	-	-	-
Diacetone	A	A	U	U	U
Diacetone Alcohol	A	A	B	U	U
Dialkyl Sulphates	A	-	-	-	-
Diallyl Ether	A	-	-	-	-
Diallyl Phthalate	A	-	-	-	-
Diamylamine	A 9503	-	-	-	-
Diazinon	A	U	B	-	B
Dibenzyl	A	-	-	-	-
Dibenzyl Ether	A	B	-	-	U

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Chemical	Isolast®	EPDM	VMQ	FVMQ	FKM
Dibenzyl Sebecate	A	B	C	C	B
Diborane	A	-	-	-	-
Dibromoethane	A	-	-	-	-
Dibromoethylbenzene	A	U	U	B	B
Dibutyl Amine	A 9503	C	C	U	U
Dibutyl Cellosolve Adipate	A	-	-	-	-
Dibutyl Ether	A	C	U	C	C
Dibutyl Methylenedithio Glycolat	A	-	-	-	-
Dibutyl Phthalate	A	B	B	C	C
Dibutyl Sebecate	A	B	B	B	B
Dibutyl Thioglycolate	A	-	-	-	-
Dibutyl Thiourea	A	-	-	-	-
Dichloroacetic Acid	A	U	U	U	U
Dichloroaniline	A	-	-	-	-
Dichlorobutane	A	-	-	-	-
Dichlorobutene	A	U	U	U	B
Dichlorodifluoromethane (FREON 12)	B	-	-	-	-
Dichlorodiphenyl Dichloroethan (DDD)	A	-	-	-	-
Dichlorodiphenyltrichloroethan, DDT	A	-	-	-	-
Dichloroethane	A	U	U	U	B
Dichloroethylene	A	U	U	U	B
Dichlorofluoromethane (FREON 21)	A	-	-	-	-
Dichlorohydrin	A	-	-	-	-
Dichloroisopropyl Ether	A	U	U	U	U
Dichloromethane	A	U	U	B	B
Dichlorophenol	A	-	-	-	-
Dichlorophenoxyacetic Acid	A	-	-	-	-
Dichloropropane	A	-	-	-	-
Dichloropropene	A	-	-	-	-
Dichlorosilane	A	-	-	-	-
Dichlorotetrafluoroethane (FREON 114)	B	-	-	-	-
Dicyclohexylamine	A 9503	U	-	U	U
Dieldrin	A	-	-	-	-
Diesel Oil	A	U	U	A	A
Diethanolamine (DEA)	A 9503	-	-	-	-
Diethyl Carbonate	A	U	U	B	A
Diethyl Ether	A	U	U	C	U
Diethyl Phthalate	A	-	-	-	-
Diethyl Sebecate	A	B	B	B	B
Diethyl Sulphate	A	U	U	U	U
Diethylamine	A 9503	B	B	U	U

Chemical	Isolast®	EPDM	VMQ	FVMQ	FKM
Diethylaniline	A	A	U	U	U
Diethylbenzene	A	U	U	C	A
Diethylene Glycol	A	A	B	A	A
Diethylenetriamine	A 9503	A	U	U	U
Difluorodibromomethane	A	-	-	-	-
Difluorodichloromethane (FREON 12)	B	-	-	-	-
Difluoroethane	A	-	-	-	-
Difluoromonochloroethane	A	-	-	-	-
Diglycolic Acid	A	-	-	-	-
Dihydroxydiphenylsulphone	A	-	-	-	-
Diisobutyl Ketone	A	A	U	U	U
Diisobutylcarbinol	A	-	-	-	-
Diisobutylene	A	U	U	C	A
Diisopropyl Ether (DIPE)	A	-	-	-	-
Diisopropyl Ketone	A	A	U	U	U
Diisopropylbenzene	A	U	-	B	A
Diisopropylidene	A	C	U	U	U
Dimethyl Acetamide	A	-	-	-	-
Dimethyl Aniline (Xylidine)	A	B	U	U	U
Dimethyl Disulphide (DMDS)	A	-	-	-	-
Dimethyl Ether	A	U	A	A	A
Dimethyl Formaldehyde	A	-	-	-	-
Dimethyl Formamide (DMF)	A	B	B	U	U
Dimethyl Hydrazine	A	A	U	U	U
Dimethyl Phenyl Carbinol	A	-	-	-	-
Dimethyl Phenyl Methanol	A	-	-	-	-
Dimethyl Phthalate	A	B	-	B	B
Dimethyl Sulphoxide (DMSO)	A	-	-	-	-
Dimethyl Terephthalate (DMT)	A	-	-	-	-
Dimethylamine (DMA)	A 9503	B	U	U	U
Dinitrochlorobenzene	A	-	-	-	-
Dinitrotoluene (DNT)	A	U	U	U	U
Diocetyl Sebecate	A	B	C	C	B
Diocetylamine	A 9503	A	U	U	U
Dioxane	A	B	U	C	U
Dioxolane	A	B	U	U	U
Dipentene	A	U	U	C	A
Diphenyl ether	A	U	C	B	A
Diphenylamine (DPA)	A 9503	-	-	-	-
Diphenylene Oxide	A	-	-	-	-
Diphenylpropane	A	-	-	-	-
Dodecylbenzene	A	-	-	-	-
Dowanol P Mix	A	-	-	-	-



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Chemical	Isolast [®]	EPDM	VMQ	FVMQ	FKM
Dowtherm A	A	U	U	B	A
Dowtherm E	A	U	U	B	A
Dowtherm Fluids	A	U	C	B	A

E

Chemical	Isolast [®]	EPDM	VMQ	FVMQ	FKM
Epichlorohydrin	A 9503	B	U	U	U
Erucic Acid	A	-	-	-	-
Essential Oils	A	U	U	B	B
Ethane	A	U	U	B	A
Ethanol	A	-	-	-	-
Ethanolamine	A 9503	B	B	U	U
Ether, Ethyl-tert.-Butyl	A	-	-	-	-
Ethyl Acetate	A	B	B	U	U
Ethyl Acetoacetate	A	B	B	U	U
Ethyl Acrylate	A	B	U	U	U
Ethyl Alcohol	A	A	A	A	C
Ethyl Aluminum Dichloride	A	-	-	-	-
Ethyl Benzene	A	U	U	A	A
Ethyl Benzoate	A	A	U	A	A
Ethyl Bromide	A	-	-	-	-
Ethyl Butyrate	A	-	-	-	-
Ethyl Cellosolve	A	U	U	U	U
Ethyl Cellulose	A	B	C	U	U
Ethyl Chloride	A	C	U	A	A
Ethyl Chlorocarbonate	A	B	U	B	A
Ethyl Chloroformate	A	B	U	U	U
Ethyl Ether	A	C	U	C	U
Ethyl Formate	B	B	-	A	A
Ethyl Hexanol	A	-	-	-	-
Ethyl Lactate	A	-	-	-	-
Ethyl Mercaptan	A	C	C	-	B
Ethyl Nitrite	A	-	-	-	-
Ethyl Oxalate	A	A	U	B	A
Ethyl Pentachlorobenzene	A	U	U	B	A
Ethyl Pyridine	A	-	-	-	-
Ethyl Stearate	A	-	-	-	-
Ethylamine	A 9503	-	-	-	-
Ethylcyclopentane	A	-	-	-	-
Ethylene	A	B	-	A	A
Ethylene Chloride	A	C	U	C	B
Ethylene Chlorohydrin	A	B	C	B	A
Ethylene Cyanohydrin	A	-	-	-	-

Chemical	Isolast [®]	EPDM	VMQ	FVMQ	FKM
Ethylene Dibromide	A	-	-	-	-
Ethylene Dichloride	A	C	U	C	A
Ethylene Glycol	A	A	A	A	A
Ethylene Oxide	A 9503	C	U	U	U
Ethylene Trichloride	A	C	U	C	A
Ethylenediamine	B 9503	A	A	U	U
Ethylenehydrochlorine	A	-	-	-	-
Ethyleneimine	A	-	-	-	-
Ethylmorpholine	A	-	-	-	-
Ethylsulphuric Acid	A	-	-	-	-

F

Chemical	Isolast [®]	EPDM	VMQ	FVMQ	FKM
Fatty Acids	A	C	C	-	A
Ferric Acetate	A	A	A	A	A
Ferric Ammonium Sulphate	A	A	A	A	A
Ferric Chloride (aq)	A	A	B	A	A
Ferric Ferrocyanide	A	-	-	-	-
Ferric Hydroxide	A	-	-	-	-
Ferric Nitrate (aq)	A	A	C	A	A
Ferric Sulphate (aq)	A	A	B	A	A
Ferrous Ammonium Citrate	A	-	-	-	-
Ferrous Ammonium Sulphate	A	-	-	-	-
Ferrous Carbonate	A	-	-	-	-
Ferrous Chloride	A	-	-	-	-
Ferrous Iodide	A	-	-	-	-
Ferrous Sulphate	A	-	-	-	-
Ferrous Tartrate	A	-	-	-	-
Fish Oil	A	U	A	A	A
Fluorinated Cyclic Ethers	A	A	-	-	-
Fluorine	B	U	U	U	U
Fluorine (Gas)	C	-	-	-	-
Fluorine (Liquid)	B	U	U	-	B
Fluorobenzene	A	U	U	B	A
Fluoroboric Acid	A	A	-	-	-
Fluoroform	A	-	-	-	-
Fluorolube	A	A	A	B	B
Fluorophosphoric Acid	A	-	-	-	-
Fluorosilicic Acid	A	B	U	U	A
Fluorosulphonic Acid	A	-	-	-	-
Formaldehyde	A	A	B	U	U
Formamide	A 9503	-	-	-	-
Formic Acid	A	A	B	C	C

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Chemical Compatibility Guide



Chemical	Isolast®	EPDM	VMQ	FVMQ	FKM
Freon 11	B	U	U	B	B
Freon 112	A	U	U	-	A
Freon 113	B	C	U	U	B
Freon 114	B	A	U	B	B
Freon 114B2	B	U	U	-	B
Freon 115	B	A	-	-	B
Freon 116	B	-	-	-	-
Freon 12	B	B	U	C	B
Freon 123	C	-	-	-	-
Freon 124	B	-	-	-	-
Freon 13	B	A	U	U	B
Freon 134a	B	-	-	-	-
Freon 13B1	B	A	U	-	B
Freon 14	B	-	-	-	-
Freon 141b	A	-	-	-	-
Freon 142b	B	B	-	-	U
Freon 152a	B	A	-	-	U
Freon 152b	B	-	-	-	-
Freon 21	A	U	U	-	U
Freon 218	B	A	-	-	A
Freon 22	B	A	U	U	U
Freon 23	B	-	-	-	-
Freon 31	B	A	-	-	U
Freon 32	B	A	-	-	U
Freon 502	B	A	-	-	B
Freon B	B	-	-	-	-
Freon BF	B	U	U	-	A
Freon C316	B	A	-	-	A
Freon C318	B	A	-	-	B
Freon MF	B	U	U	-	B
Freon T-P35	B	A	A	-	A
Freon T-WD602	B	B	U	-	A
Freon TA	B	B	C	-	C
Freon TC	B	B	U	-	A
Freon TF	B	U	U	-	B
Freon TMC	B	C	C	-	A
Fuel Oils	A	U	U	A	A
Fumaric Acid	A	B	B	A	A
Fuming Sulphuric Acid	A 8325	A	U	U	A
Furane	A	U	U	U	U
Furfural (Furfuraldehyde)	A	B	U	U	U
Furfuryl Alcohol	A	B	U	U	U
Furnace gas	A	U	A	B	A
Furoic Acid	A 8325	-	-	-	-
Fyrquel	A	A	A	C	A

G

Chemical	Isolast®	EPDM	VMQ	FVMQ	FKM
Gallic Acid	A	B	A	A	A
Gasoline	A	U	U	A	A
Gelatin	A	A	A	A	A
Generator Gas	A	U	B	B	A
Glauber's Salt	A	B	-	A	A
Gluconic Acid	A	-	-	-	-
Glucose	A	A	A	A	A
Glue	A	A	A	A	A
Glutamic Acid	A	-	-	-	-
Glycerin (Glycerol)	A	A	A	A	A
Glycerol Triacetate	A	-	-	-	-
Glycerophosphoric Acid	A	-	-	-	-
Glyceryl Phosphate	A	-	-	-	-
Glycidol	A	-	-	-	-
Glycol Monoether	A	-	-	-	-
Glycolic Acid	A	-	-	-	-
Glycols	A	A	A	A	A
Glyoxylic Acid	A	-	-	-	-
Green Sulphate Liquor	A	A	A	B	A

H

Chemical	Isolast®	EPDM	VMQ	FVMQ	FKM
Halothane, various	A	-	-	-	-
Halowax Oil	A	U	U	A	A
Heavy Water	A	A	-	-	A
HEF-3	A	U	U	B	A
Helium	A	A	U	U	A
Heptachlor	A	-	-	-	-
Heptachlorobutene	A	-	-	-	-
Heptaldehyde	A	-	-	-	-
Heptanoic Acid	A	U	C	A	A
Hexachloroacetone	A	-	-	-	-
Hexachlorobutadiene	A	-	-	-	-
Hexachlorobutene	A	-	-	-	-
Hexachloroethane	A	-	-	-	-
Hexaethyl Tetraphosphate	A	-	-	-	-
Hexafluoroethane (FREON 116)	B 8325	-	-	-	-
Hexafluoroxylene	A	-	-	-	-
Hexamethyldisilazane	A	-	-	-	A
Hexamethylene	A	-	-	-	A



ISOLAST[®] perfluoroelastomer seals

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Chemical	Isolast [®]	EPDM	VMQ	FVMQ	FKM
Hexamethylene Diammoniumadipate	A	-	-	-	-
Hexamethylenediamine	B 9503	-	-	-	-
Hexamethylenetetramine	B 9503	-	-	-	-
Hexane	A	U	U	A	A
Hexyl Acetate	A	-	-	-	-
Hexyl Alcohol	A	C	B	B	A
Hexylene Glycol	A	-	-	-	-
Hexylresorcinol	A	-	-	-	-
Hydraulic Oils, petroleum based	A	U	C	A	A
Hydraulic Oils, synthetic	A	-	-	-	-
Hydrazine	A 9503	A	C	U	U
Hydrazine Dihydrochloride	A	-	-	-	A
Hydrazine Hydrate	A 9503	A	U	B	C
Hydriodic Acid	A 8325	-	-	-	-
Hydrobromic Acid	A	A	U	C	A
Hydrobromic Acid 40 %	A	A	U	C	A
Hydrocarbons	A	-	-	-	-
Hydrochloric Acid (cold) 37 %	A 8325	A	C	B	A
Hydrochloric Acid (conc.)	A8325	-	-	-	-
Hydrochloric Acid (hot) 37 %	A 8325	C	U	C	B
Hydrocyanic Acid	A	A	C	B	A
Hydrofluoric Acid	A 8325	U	U	U	C
Hydrofluoric Acid (Anhydrous)	A 8325	C	U	U	U
Hydrofluoric Acid (conc) cold	A 8325	C	U	U	A
Hydrogen Bromide	A	U	B	U	A
Hydrogen Chloride	A	-	-	-	-
Hydrogen Cyanide	A	-	-	-	-
Hydrogen Fluoride	A 8325	-	-	-	-
Hydrogen Gas	A	A	C	C	A
Hydrogen Iodide	A	-	-	-	-
Hydrogen Peroxide (90 %)	A	B	B	B	B
Hydrogen Sulphide	A	A	C	C	U
Hydroquinone	A	B	B	B	B
Hypochlorous Acid	A	B	-	-	A

Chemical	Isolast [®]	EPDM	VMQ	FVMQ	FKM
Isoamyl Butyrate	A	-	-	-	-
Isoamyl Valerate	A	-	-	-	-
Isoborneol	A	-	-	-	-
Isobutane	A	U	U	A	A
Isobutyl Acetate	A	-	-	-	-
Isobutyl Alcohol	A	A	A	B	A
Isobutyl Chloride	A	-	-	-	-
Isobutyl Methyl Ketone	A	A	U	U	U
Isobutyl Phosphate	A	-	-	-	-
Isobutyric Acid	A	-	-	-	-
Isodecanol	A	-	-	-	-
Isoeugenol	A	-	-	-	-
Isooctane	A	U	U	A	A
Isopentane	A	U	U	A	A
Isophorone	A	C	U	U	U
Isopropyl Acetate	A	B	U	U	U
Isopropyl Alcohol	A	A	A	B	A
Isopropyl Chloride	A	U	U	B	A
Isopropyl Ether	A	U	U	C	U
Isopropylacetone	A	-	-	-	-
Isopropylamine	A 9503	-	-	-	-
Isovaleric Acid	A	-	-	-	-

J

Chemical	Isolast [®]	EPDM	VMQ	FVMQ	FKM
Jet A Fuel	A	-	-	-	-
JP 4 Fuel	A	-	-	-	-
JP 5 (Fuel)	A	U	U	B	A
JP 6 (Fuel)	A	U	U	B	A
JP 6 Fuel	A	-	-	-	-
JP X (Fuel)	A	U	U	U	U
JP3 (Fuel)	A	U	U	A	A

K

Chemical	Isolast [®]	EPDM	VMQ	FVMQ	FKM
Kerosene	A	U	U	A	A

I

Chemical	Isolast [®]	EPDM	VMQ	FVMQ	FKM
Indole	A	-	-	-	-
Iodine	A	B	U	A	A
Iodine Pentafluoride	B	U	U	U	U
Iodoform	A	A	U	U	A
Isoamyl Acetate	A	-	-	-	-

ISOLAST[®] perfluoroelastomer seals

Chemical Compatibility Guide



L

Chemical	Isolast [®]	EPDM	VNMQ	PVDF	FKM
Lacquer Solvents	A	U	U	U	U
Lacquers	A	U	U	U	U
Lactic Acid (Cold)	A	A	A	A	A
Lactic Acid (Hot)	A	U	B	B	A
Lard (Animal Fats)	A	B	B	A	A
Lauric Acid	A	-	-	-	-
Lavender Oil	A	U	U	B	A
Lead Acetate	A	A	U	U	U
Lead Acetate Salt Solution	A	A	U	U	U
Lead Arsenate	A	-	-	-	-
Lead Azide	A	-	-	-	-
Lead Bromide	A	-	-	-	-
Lead Carbonate	A	-	-	-	-
Lead Chloride	A	-	-	-	-
Lead Chromate	A	-	-	-	-
Lead Dioxide	A	-	-	-	-
Lead Linoleate	A	-	-	-	-
Lead Naphthenate	A	-	-	-	-
Lead Nitrate	A	A	B	A	-
Lead Oxide	A	-	-	-	-
Lead Sulphamate	A	A	B	A	A
Ligroin	A	U	U	A	A
Lime Bleach	A	A	B	A	A
Lime Sulphur	A	A	A	A	A
Lindol (Hydraulic Fluids)	A	A	C	C	B
Linoleic Acid	A	U	B	-	B
Linseed Oil	A	C	A	A	A
Liquefied Petroleum Gas (LPG)	A	U	C	C	A
Lithium Bromide	A	A	-	-	A
Lithium Carbonate	A	A	-	-	A
Lithium Chloride	A	A	-	-	A
Lithium Citrate	A	A	-	-	A
Lithium Hydroxide	A	A	-	-	C
Lithium Hypochlorite	A	A	-	-	A
Lithium Nitrate	A	A	-	-	A
Lithium Nitrite	A	A	-	-	A
Lithium Perchlorate	A	A	-	-	A
Lithium Salicylate	A	A	-	-	A
Lithopone	A	-	-	-	-
Lubricating Oils	A	U	U	A	A
Lye	A	A	B	A	B

M

Chemical	Isolast [®]	EPDM	VNMQ	PVDF	FKM
Magnesium Chloride	A	A	A	A	A
Magnesium Hydroxide	A	A	A	A	B
Magnesium Salts	A	A	A	A	A
Magnesium Sulphate	A	A	A	A	A
Magnesium Sulphite	A	A	A	A	A
Magnesium Trisilicate	A	A	A	A	A
Malathion	A	-	-	-	-
Maleic Acid	A	B	-	-	A
Maleic Anhydride	A	B	-	-	U
Maleic Hydrazide	A	-	-	-	-
Malic Acid	A	B	B	A	A
Mandelic Acid	A	-	-	-	-
Manganese Acetate	A	A	A	A	A
Manganese Carbonate	A	A	A	A	A
Manganese Dioxide	A	A	A	A	A
Manganese Gluconate	A	A	A	A	A
Manganese Hypophosphite	A	A	A	A	A
Manganese Linoleate	A	A	A	A	A
Manganese Naphthenate	A	A	A	A	A
Manganous Chloride	A	A	A	A	A
Manganous Phosphate	A	A	A	A	A
Manganous Sulphate (aq)	A	A	A	A	A
Mannitol	A	A	-	-	A
Mercaptan	A	A	U	U	U
Mercaptobenzothiazole	A	-	-	-	-
Mercuric Acetate	A	A	A	A	A
Mercuric Cyanide	A	A	-	-	A
Mercuric Iodide	A	A	-	-	A
Mercuric Nitrate	A	A	-	-	A
Mercuric Sulphate	A	A	-	-	A
Mercuric Sulphite	A	A	-	-	A
Mercurous Nitrate	A	A	A	A	A
Mercury	A	A	-	-	A
Mercury Chloride	A	A	A	A	A
Mercury Fulminate	A	A	-	-	A
Mercury Salts	A	A	-	-	A
Mesityl Oxide	A	B	U	U	U
Metacresol	A	-	-	-	-
Metaldehyde	A	-	-	-	-
Metanitroaniline	A	-	-	-	-
Metatoluidine	A	-	-	-	-



ISOLAST[®] perfluoroelastomer seals

Chemical Compatibility Guide

Chemical	Isolast [®]	EPDM	VMQ	FVMQ	FKM
Methacrylic Acid	A	B	U	U	U
Methallyl Chloride	A	-	-	-	-
Methane	A	U	B	B	A
Methoxychlor (DMDT)	A	-	-	-	-
Methyl Abietate	A	-	-	-	-
Methyl Acetate	A	A	U	U	U
Methyl Acetoacetate	A	-	-	-	-
Methyl Acetophenone	A	-	-	-	-
Methyl Acrylate	A	B	U	U	U
Methyl Alcohol (Methanol)	A	A	A	A	U
Methyl Amylketone	A	-	-	-	-
Methyl Anthranilate	A	-	-	-	-
Methyl Benzoate	A	-	-	-	-
Methyl Butyl Ketone	A	A	C	U	U
Methyl Butyrate	A	-	-	-	-
Methyl Carbonate	A	U	U	U	U
Methyl Cellosolve	A	B	U	U	U
Methyl Cellulose	A	B	B	U	B
Methyl Chloride	A	C	U	B	B
Methyl Chloroacetate	A	-	-	-	-
Methyl Chloroformate	A	-	-	-	-
Methyl Chlorosilanes	A	-	-	-	-
Methyl Cyanide (Acetonitrile)	A	-	-	-	-
Methyl Cyclohexanone	A	-	-	-	-
Methyl Cyclopentane	A	U	U	B	B
Methyl Dichloride	A	-	-	-	-
Methyl Ether (Dimethyl/Monomethylether)	A	U	A	A	A
Methyl Ethyl Ketone (MEK)	A	A	U	U	U
Methyl Ethyl Ketone Peroxide	A	-	-	-	-
Methyl Ethyl Oleate	A	-	-	-	-
Methyl Formate	A	B	-	-	-
Methyl Hexyl Ketone	A	-	-	-	-
Methyl Iodide	A	-	-	-	-
Methyl Isobutyl Ketone	A	B	U	U	U
Methyl Isocyanate	A	-	-	-	-
Methyl Isopropyl Ketone	A	-	-	-	-
Methyl Isovalerate	A	-	-	-	-
Methyl Lactate	A	-	-	-	-
Methyl Methacrylate	A	C	U	U	U
Methyl Oleate	A	B	-	B	B
Methyl Pentadiene	A	-	-	-	-
Methyl Phenylacetate	A	-	-	-	-
Methyl Salicylate	A	B	-	-	-
Methyl Tertiary Butyl Ether	A	-	-	-	-
Methyl Valerate	A	-	-	-	-

Chemical	Isolast [®]	EPDM	VMQ	FVMQ	FKM
Methylacrylic Acid	A	B	U	U	U
Methylal	A	-	-	-	-
Methylamine	A 9503	A	U	U	U
Methylamyl Acetate	A	-	-	-	-
Methylene-di-p-phenylene isocyanat	A	-	-	-	-
Methylene Bromide	A	U	-	A	A
Methylene Chloride	A	C	U	B	B
Methylene Iodide	A	-	-	-	-
Methylglycerol	A	-	-	-	-
Methylisobutyl Carbinol	A	-	-	-	-
Methylisobutylketon	A	-	-	-	-
Methylpyrrolidine	A	-	-	-	-
Methylpyrrolidone	A	-	-	-	-
Methylsulphuric Acid	A	-	-	-	-
MIL-L-23699 Lubricants	A	-	-	-	-
MIL-L-7808 Lubricants	A	-	-	-	-
Mineral Oil	A	C	B	A	A
Mobil 254 Lubricant	A	-	-	-	-
MobilJet II Lubricant	A	-	-	-	-
Molybdenum Oxide	A	-	-	-	-
Molybdenum Trioxide	A	-	-	-	-
Molybdic Acid	A	-	-	-	-
Monobromobenzene	A	-	-	-	-
Monobromotoluene	A	-	-	-	-
Monochloroacetic Acid	A	A	-	-	U
Monochlorobenzene	A	U	U	B	A
Monochlorobutene	A	-	-	-	-
Monochlorohydrin	A	-	-	-	-
Monoethanol Amine	A 9503	A	B	U	U
Monoethylamine	A 9503	-	-	-	-
Monoisopropylamine	A 9503	-	-	-	-
Monomethyl Aniline	A	B	-	-	B
Monomethylamine	A 9503	-	-	-	-
Mononitrotoluene	A	-	-	-	-
Monovinyl Acetylene	A	B	B	-	A
Morpholine	A	-	-	-	-
Motor Oils	A	-	-	-	-
Myristic Acid	A	-	-	-	-

ISOLAST[®] perfluoroelastomer seals
Chemical Compatibility Guide



N

Chemical	Isolast [®]	EPDM	VMQ	FVMQ	FKM
N-Hexaldehyde (N-Hexanal)	A 8325	A	B	U	U
N-Hexene-1	A	U	U	A	A
N-Octane	A	U	U	B	A
Naphtha	A	U	U	B	A
Naphthalene	A	U	U	A	A
Naphthalene Chloride	A	-	-	-	-
Naphthalene Sulphonic Acid	A	-	-	-	-
Naphthalenic Acid	A	U	U	A	A
Naphthalonic Acid	A	-	-	-	-
Naphthenic Acid	A	-	-	-	-
Naphthylamine	A	-	-	-	-
Natural Gas	A	U	A	C	A
Neon	A	A	A	A	A
Neville Acid	A	B	U	B	A
Nickel Acetate (aq)	A	A	U	U	U
Nickel Ammonium Sulphate	A	A	-	-	-
Nickel Chloride (aq)	A	A	A	A	A
Nickel Cyanide	A	A	-	-	-
Nickel Nitrate	A	A	-	-	-
Nickel Salts	A	A	-	-	A
Nickel Sulphate (aq)	A	A	A	A	A
Nicotinamide	A	-	-	-	-
Nicotinamide Hydrochloride	A	-	-	-	-
Nicotine	A	-	-	-	-
Nicotine Sulphate	A	-	-	-	-
Nitric Acid (0-50%)	A 8325	B	B	B	A
Nitric Acid (50-100%)	B 8325	U	U	C	C
Nitric Acid, Inhibited	B 8325	U	U	U	U
Nitric Acid, White Fuming	B 8325	U	U	U	B
Nitro Methane	A	B	U	U	U
Nitroaniline	A	-	-	-	-
Nitrobenzene	A	A	U	U	B
Nitrobenzoic Acid	A	-	-	-	-
Nitrocellulose	A	-	-	-	-
Nitrochlorobenzene	A	-	-	-	-
Nitrochloroform	A	-	-	-	-
Nitrodiethylaniline	A	-	-	-	-
Nitrodiphenyl Ether	A	-	-	-	-
Nitroethane	A	B	U	U	U
Nitrofluorobenzene	A	-	-	-	-
Nitrogen	A	A	A	A	A
Nitrogen Oxides	A	-	-	-	-
Nitrogen Trifluoride	B	-	-	-	-

Chemical	Isolast [®]	EPDM	VMQ	FVMQ	FKM
Nitroglycerine	A	A	U	U	A
Nitroisopropylbenzene	A	-	-	-	-
Nitrophenol	A	-	-	-	-
Nitropropane	A	-	-	-	-
Nitrosyl Chloride	A	-	-	-	-
Nitrosylsulphuric Acid	A	-	-	-	-
Nitrothiophene	A	-	-	-	-
Nitrotoluene	A	U	U	U	U
Nitrous Acid	A	A	-	-	A
Nitrous Oxide	A	-	-	-	-
Nonane	A	-	-	-	-

O

Chemical	Isolast [®]	EPDM	VMQ	FVMQ	FKM
O-Dichlorobenzene	A	U	U	B	A
Octachlorotoluene	A	U	U	B	A
Octadecane	A	U	U	A	A
Octanol	A 8325	-	-	-	-
Octyl Acetate	A	-	-	-	-
Octyl Alcohol	A	C	B	B	A
Octyl Chloride	A	-	-	-	-
Octyl Phthalate	A	-	-	-	-
Olefins	A	-	-	-	-
Oleic Acid	A	U	U	-	B
Oleum (Fuming Sulphuric Acid)	A	U	U	B	A
Oleyl Alcohol	A	-	-	-	-
Olive Oil	A	B	C	A	-
Ortho Chloroaniline	A	-	-	-	A
Ortho Chlorophenol	A	-	-	-	-
Ortho Cresol	A	-	-	-	-
Ortho Nitrotoluene	A	-	-	-	-
Oxalic Acid	A	A	B	A	-
Oxygen (Cold)	A	A	A	A	A
Oxygen (Hot)	A 8325	C	B	U	A
Ozone	A	A	A	B	A

P

Chemical	Isolast [®]	EPDM	VMQ	FVMQ	FKM
P-Cymene (Isopropyltoluene)	A	U	U	B	A
Paint Thinner	A	U	U	B	A
Palmitic Acid	A	B	U	A	B



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Chemical Compatibility Guide

Chemical	Isolast [®]	EPDM	VMQ	FVMQ	FKM
Para-Aminobenzoic Acid	A	-	-	-	A
Para-Aminosalicylic Acid	A	-	-	-	-
Para-Bromobenzylphenyl Ether	A	-	-	-	-
Para-Chlorophenol	A	-	-	-	-
Para-Dichlorobenzene	A	U	U	B	A
Para-Formaldehyde	A	-	-	-	-
Para-Nitroaniline	A	-	-	-	-
Para-Nitrobenzoic Acid	A	-	-	-	-
Para-Nitrophenol	A	-	-	-	-
Para-Toluene Sulphonic Acid	A	-	-	-	-
Paracymene	A	-	-	-	-
Paraffins	A	U	B	A	A
Paraldehyde	A	-	-	-	-
Parathion	A	-	-	-	-
Peanut Oil	A	C	A	A	-
Pectin (Liquor)	A	A	A	A	A
Pelargonic Acid	A	-	-	-	-
Penicillin (Liquid)	A	A	-	-	A
Pentachloroethane	A	-	-	-	-
Pentachlorophenol	A	-	-	-	-
Pentaerythritol	A	-	-	-	-
Pentaerythritol Tetranitrate	A	-	-	-	-
Pentane	A	U	U	U	A
Pentoxone	A	-	-	-	-
Pentyl Pentanoate	A	-	-	-	-
Peracetic Acid	A 8325	-	-	-	-
Perchloric Acid	A 8325	B	U	A	A
Perchloroethylene	A	U	U	B	A
Perfluorotriethylamine	B 9503	-	-	-	-
Permanganic Acid	A 8325	-	-	-	-
Persulphuric Acid (Caro's Acid)	A	-	-	-	-
Petrolatum Ether	A	U	U	B	A
Petroleum, Crude	A 9503	U	B	B	A
Petroleum-Above 121°C	A	U	U	U	B
Petroleum-Below 121°C	A	U	B	B	A
Phenol (Carbolic Acid)	A	B	U	A	A
Phenolic Sulphonate	A	-	-	-	-
Phenolsulfonic Acid	A	-	-	-	-
Phenyl Acetate	A	-	-	-	-
Phenyl Ethyl Ether	A	U	U	U	U
Phenyl Hydrazine	A 9503	B	-	-	A
Phenylacetamide	A	-	-	-	-
Phenylacetic Acid	A	-	-	-	-
Phenylbenzene	A	U	U	B	A
Phenylene Diamine	A 9503	-	-	-	-

Chemical	Isolast [®]	EPDM	VMQ	FVMQ	FKM
Phenylethyl Alcohol	A	-	-	-	-
Phenylethyl Malonic Ester	A	-	-	-	-
Phenylglycerine	A	-	-	-	-
Phenylhydrazine Hydrochlorid	A 9503	-	-	-	-
Phenylmercuric Acetate	A	-	-	-	-
Phorone (Diisopropylidene Aceton)	A	C	U	U	U
Phosgene	A	-	-	-	-
Phosphine	A	A	U	U	B
Phosphoric Acid, 20 %	A	A	B	B	A
Phosphoric Acid, 45 %	A	A	C	B	A
Phosphorus (Molten)	U	U	U	U	U
Phosphorus Oxychloride	A	-	-	-	-
Phosphorus Trichloride	A	A	-	A	A
Phthalic Acid	A	A	B	A	B
Phthalic Anhydride	A	A	-	-	-
Picric Acid	A	B	U	B	A
Pinene	A	U	U	B	A
Piperazine	A 9503	-	-	-	-
Piperidine	A	U	U	U	U
Polyethylene Glycol	A	-	-	-	-
Polyglycerol	A	-	-	-	-
Polyglycol	A	-	-	-	-
Polyvinyl Acetate Emulsion	A	A	-	-	-
Potassium (Molten)	U	U	U	U	U
Potassium Acetate	A	A	U	U	B
Potassium Alum	A	-	-	-	-
Potassium Aluminum	A	A	-	-	-
Potassium Antimonate	A	A	-	-	-
Potassium Bicarbonate	A	A	A	A	A
Potassium Bichromate	A	A	-	-	A
Potassium Bifluoride	A	A	-	-	A
Potassium Bisulphate	A	A	-	-	A
Potassium Bisulphite	A	A	-	-	A
Potassium Bitartrate	A	A	-	-	A
Potassium Bromide	A	A	-	-	A
Potassium Carbonate	A	A	-	-	A
Potassium Chlorate	A	A	-	-	A
Potassium Chloride	A	A	A	A	A
Potassium Chromates	A	A	-	-	A
Potassium Citrate	A	A	-	-	A
Potassium Cyanate	A	A	-	-	A
Potassium Cyanide	A	A	A	A	A
Potassium Dichromate	A	A	A	A	A
Potassium Diphosphate	A	A	-	-	A
Potassium Ferricyanide	A	A	-	-	A

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Chemical Compatibility Guide



Chemical	Isolast [®]	EPDM	VMQ	FVMQ	FKM
Potassium Ferrocyanide	A				A
Potassium Fluoride	A	-	-	-	A
Potassium Glucocyanate	A	-	-	-	A
Potassium Hydroxide	A	A	C	C	U
Potassium Hypochlorite	A	-	-	-	-
Potassium Iodate	A	-	-	-	-
Potassium Iodide	A	-	-	-	-
Potassium Metabisulphate	A	-	-	-	-
Potassium Metasilicate	A	-	-	-	-
Potassium Monochromate	A	-	-	-	-
Potassium Nitrate	A	A	A	A	A
Potassium Nitrite	A	-	-	-	-
Potassium Oxalate	A	-	-	-	-
Potassium Perchlorate	A	-	-	-	-
Potassium Perfluoro Acetate	A	A	-	-	U
Potassium Permanganate	A	A	U	U	A
Potassium Peroxide	A	-	-	-	-
Potassium Persulfate	A	A	U	U	A
Potassium Phosphate	A	-	-	-	-
Potassium Phosphate	A	-	-	-	-
Potassium Pyrosulphate	A	-	-	-	-
Potassium Silicate	A	A	-	-	A
Potassium Sodium Tartrate	A	-	-	-	-
Potassium Stannate	A	-	-	-	-
Potassium Stearate	A	-	-	-	-
Potassium Sulphate	A	A	A	A	-
Potassium Sulphide	A	-	-	-	A
Potassium Sulphite	A	A	-	-	A
Potassium Tartrate	A	A	-	-	A
Potassium Thiocyanate	A	-	-	-	-
Potassium Thiosulphate	A	-	-	-	-
Potassium Triphosphate	A	-	-	-	-
Pottasium Hydroxide Solution 50 %	A	A	C	C	U
Prestone Antifreeze	A	-	-	-	-
Propane	A	U	U	B	A
Propionaldehyde	A	A	U	U	U
Propionic Acid	A	-	U	U	A
Propionitrile	A	-	-	-	-
Propyl Acetate	A	B	U	U	-
Propyl Acetone	A	A	C	U	U
Propyl Alcohol	A	A	A	A	U
Propyl Nitrate	A	B	U	U	A
Propyl Propionate	A	-	-	-	U
Propylamine	A 9503	U	U	U	U
Propylbenzene	A	-	-	-	-

Chemical	Isolast [®]	EPDM	VMQ	FVMQ	FKM
Propylene	A	U	U	B	-
Propylene Chloride	A	-	-	-	A
Propylene Chlorohydrin	A	-	-	-	-
Propylene Dichloride	A	-	-	-	-
Propylene Glycol	A	-	-	-	-
Propylene Imine	A 9503	-	-	-	-
Propylene Oxide	A 9503	B	U	U	-
Pydraul, 10E, 29 ELT	A	A	U	U	U
Pydraul, 115E	A	A	U	C	A
Pydraul, 230E, 312C, 540C	A	U	U	U	A
Pydraul, 30E, 50E, 65E, 90E	A	A	A	A	A
Pyranol Transformer Oil	A	U	U	A	A
Pyridine	A	B	U	U	A
Pyridine Sulphate	A	-	-	-	U
Pyridine Sulphonic Acid	A	-	-	-	-
Pyrogallol (Pyrogallic Acid)	A	-	-	-	-
Pyrosulphuric Acid	A	-	-	-	-
Pyrosulphuryl Chloride	A	-	-	-	-
Pyrrole	A	C	B	C	-
Pyruvic Acid	A	-	-	-	U

Q

Chemical	Isolast [®]	EPDM	VMQ	FVMQ	FKM
Quinidine	A	-	-	-	-
Quinine	A	-	-	-	-
Quinine Bisulphate	A	-	-	-	-
Quinine Hydrochloride	A	-	-	-	-
Quinine Sulphate	A	-	-	-	-
Quinine Tartrate	A	-	-	-	-
Quinizarin	A	-	-	-	-
Quinoline	A	-	-	-	-
Quinone	A	-	-	-	-

R

Chemical	Isolast [®]	EPDM	VMQ	FVMQ	FKM
Radioactivity	A	-	-	-	A
Raffinate	A	A	-	-	-
Rapeseed Oil	A	U	U	A	A
Red Oil (MIL-H-5606)	A	U	U	A	A
Resorcinol	A	-	-	-	A
Rhodium	A	-	-	-	-



ISOLAST[®] perfluoroelastomer seals

Chemical Compatibility Guide

Chemical	Isolast [®]	EPDM	VMQ	FVMQ	FKM
Riboflavin	A	-	-	-	-
Ricinoleic Acid	A	-	-	-	-
RJ-1 (MIL-F-25558 B)	A	U	U	A	-
Rosin	A	-	-	-	A
RP-1 (MIL-H-25576 C)	A	U	U	A	-

S

Chemical	Isolast [®]	EPDM	VMQ	FVMQ	FKM
Saccharin Solution	A	A	A	A	A
Sal Ammoniac	A	A	B	A	A
Salicylic Acid	A	A	-	A	A
Salt Water	A	A	A	A	A
Sea Water	A	A	B	A	A
Sebacic Acid	A	-	-	-	A
Secondary Butyl Alcohol	A	-	-	-	-
Selenic Acid	A	-	-	-	-
Selenous Acid	A	-	-	-	-
Shellac	A	-	-	-	-
Silane	A	-	-	-	-
Silicate Esters	A	U	U	A	-
Silicon Fluoride	A	-	-	-	A
Silicon Tetrachloride	A	U	U	U	U
Silicone Greases	A	A	C	A	-
Silicone Oils	A	A	C	A	A
Silicone Tetrachloride (Dry)	A	-	-	-	-
Silicone Tetrachloride (Wet)	A	-	-	-	-
Silicone Tetrafluoride	A	-	-	-	-
Silver Bromide	A	A	-	-	A
Silver Chloride	A	A	-	-	A
Silver Cyanide	A	A	U	A	A
Silver Nitrate	A	A	A	A	-
Silver Sulphate	A	A	A	A	A
Skydrol 500	A	A	C	C	A
Skydrol 7000	A	A	C	C	U
Soap Solutions	A	A	A	A	B
Soda Ash	A	A	A	A	A
Sodium (molten)	U	U	U	U	U
Sodium Acetate	A	A	U	U	U
Sodium Aluminate	A	A	-	-	U
Sodium Aluminate Sulphate	A	A	-	-	-
Sodium Anthraquinone Disulphat	A	A	-	-	-
Sodium Antimonate	A	A	-	-	-
Sodium Arsenate	A	A	-	-	-

Chemical	Isolast [®]	EPDM	VMQ	FVMQ	FKM
Sodium Arsenite	A	A	-	-	-
Sodium Benzoate	A	A	-	-	-
Sodium Bicarbonate	A	A	A	A	A
Sodium Bichromate	A	A	-	-	-
Sodium Bifluoride	A	A	-	-	-
Sodium Bisulphate	A	A	-	-	-
Sodium Bisulphide	A	A	-	-	-
Sodium Bisulphite	A	A	A	A	A
Sodium Bitartrate	A	A	-	-	-
Sodium Borate	A	A	B	B	A
Sodium Bromate	A	A	-	-	-
Sodium Bromide	A	A	-	-	-
Sodium Carbonate (Soda Ash)	A	A	-	-	-
Sodium Chlorate	A	A	-	-	-
Sodium Chloride	A	A	A	A	A
Sodium Chlorite	A	A	-	-	-
Sodium Chloroacetate	A	A	-	-	-
Sodium Chromate	A	A	-	-	-
Sodium Citrate	A	A	-	-	A
Sodium Cyanamide	A	A	-	-	-
Sodium Cyanate	A	A	-	-	-
Sodium Cyanide	A	A	A	A	A
Sodium Diacetate	A	A	-	-	-
Sodium Diphenyl Sulphonate	A	A	-	-	-
Sodium Diphosphate	A	A	-	-	-
Sodium Disilicate	A	A	-	-	-
Sodium Ethylate	A	A	-	-	-
Sodium Ferricyanide	A	A	-	-	-
Sodium Ferrocyanide	A	A	-	-	-
Sodium Fluoride	A	A	-	-	A
Sodium Fluorosilicate	A	A	-	-	-
Sodium Glutamate	A	A	-	-	-
Sodium Hydride	A	A	-	-	-
Sodium Hydrogen Sulphate	A	A	-	-	-
Sodium Hydrosulphide	A	A	-	-	-
Sodium Hydrosulphite	A	A	-	-	-
Sodium Hydroxide	A	A	B	B	B
Sodium Hypochlorite	A	A	B	B	A
Sodium Hypophosphate	A	A	-	-	-
Sodium Hypophosphite	A	A	-	-	-
Sodium Hyposulphite	A	A	-	-	-
Sodium Iodide	A	A	-	-	-
Sodium Lactate	A	A	-	-	-
Sodium Metaphosphate	A	A	-	A	A
Sodium Metasilicate	A	A	-	-	-

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Chemical	Isolast [®]	EPDM	VMQ	FVMQ	FKM
Sodium Methlyate	A	A	-	-	-
Sodium Monophosphate	A	A	-	-	-
Sodium Nitrate	A	A	U	-	-
Sodium Oleate	A	A	-	-	-
Sodium Orthosilicate	A	A	-	-	-
Sodium Oxalate	A	A	-	-	-
Sodium Perborate	A	A	B	A	A
Sodium Percarbonate	A	A	-	-	-
Sodium Perchlorate	A	A	-	-	-
Sodium Peroxide	A	A	U	A	A
Sodium Persulphate	A	A	-	-	-
Sodium Phenolate	A	A	-	-	-
Sodium Phosphate	A	A	U	-	A
Sodium Pyrophosphate	A	A	-	-	-
Sodium Resinate	A	A	-	-	-
Sodium Salicylate	A	A	-	-	-
Sodium Salts	A	A	-	-	-
Sodium Sesquisilicate	A	A	-	-	-
Sodium Silicate	A	A	-	-	-
Sodium Silicofluoride	A	A	-	-	-
Sodium Sulphate	A	A	A	A	A
Sodium Sulphide	A	A	-	-	-
Sodium Sulphite	A	A	-	-	-
Sodium Tartrate	A	A	-	-	-
Sodium Tetraborate	A	A	-	-	-
Sodium Tetraphosphate	A	A	-	-	-
Sodium Tetrasulphide	A	A	-	-	-
Sodium Thioarsenate	A	A	-	-	-
Sodium Thiocyanate	A	A	-	-	-
Sodium Thiosulphate	A	A	A	A	A
Sodium Trichloroacetate	A	A	-	-	-
Sodium Triphosphate	A	A	-	-	-
Solvasol No. 1,2 and 3	A	-	-	-	-
Solvasol No. 74 and 75	A	-	-	-	-
Sorbitol	A	-	-	-	-
Soybean Oil	A	C	A	A	A
Stannic Ammonium Chloride	A	A	-	-	A
Stannic Chloride (aq)	A	A	B	A	A
Stannic Tetrachloride	A	A	-	-	A
Stannous Bisulfate	A	A	-	-	A
Stannous Bromide	A	A	A	A	A
Stannous Chloride (aq)	A	A	B	A	A
Stannous Fluoride	A	A	-	-	A
Stannous Sulphate	A	A	-	-	A
Stauffer 7700	A	-	-	-	-

Chemical	Isolast [®]	EPDM	VMQ	FVMQ	FKM
Steam - Above 150°C	A 9503	U	U	U	U
Steam - Below 150°C	A 9503	A	C	U	U
Stearic Acid	A	B	B	A	A
Stoddard Solvent	A	U	U	A	A
Strontium Acetate	A	A	A	A	A
Strontium Carbonate	A	A	A	A	A
Strontium Chloride	A	A	A	A	A
Strontium Hydroxide	A	A	-	-	B
Strontium Nitrate (aq)	A	-	-	-	-
Styrene	*	U	U	C	A
Succinic Acid	A	A	A	A	A
Sucrose Solution	A	A	A	A	A
Sulphanilic Acid	A	-	-	-	-
Sulphanilic Chloride	A	-	-	-	-
Sulphanilimide	A	-	-	-	-
Sulphite Liquors	A	B	U	B	-
Sulphonated Oils	A	-	-	-	-
Sulphonic Acid	A	-	-	-	-
Sulphonyl Chloride	B	-	-	-	-
Sulphur	A	A	C	A	-
Sulphur Chloride	A	U	C	A	A
Sulphur Dioxide (Dry)	A	A	B	B	A
Sulphur Dioxide (Liquified)	A	A	B	B	A
Sulphur Dioxide (Wet)	A	A	B	B	A
Sulphur Hexafluoride	A	B	B	B	A
Sulphur Monochloride	A	-	-	-	B
Sulphur Trioxide	A	B	B	B	-
Sulphuric Acid (20% Oleum)	A	U	U	U	A
Sulphuric Acid (Conc.)	A 8325	C	U	U	A
Sulphuric Acid (Dilute)	A	B	U	C	A
Sulphurous Acid	A	B	U	-	A
Sulphuryl Chloride	A	-	-	-	A

T

Chemical	Isolast [®]	EPDM	VMQ	FVMQ	FKM
Tallow	A	B	B	U	A
Tannic Acid (Tannin)	A	A	B	-	-
Tar	A	U	U	C	B
Tar, Bituminous	A	C	B	A	A
Tartaric Acid	A	B	A	A	A
TDI (Toluene Diisocyanate)	A	B	U	U	A
Terpineol	A	C	-	A	U



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Chemical	Isolast [®]	EPDM	VMQ	FVMQ	FKM
Terpinyl Acetate	A	-	-	-	A
Tertiary Amyl Methyl	A	-	-	-	-
Tertiary Butyl Alcohol	A	B	B	B	-
Tertiary Butyl Catechol	A	B	-	A	A
Tertiary Butyl Mercaptan	A	U	U	-	A
Tetrabromoethane	A	U	U	B	A
Tetrabromomethane	A	U	U	B	A
Tetrabutyl Titanate	A	A	-	A	A
Tetrachlorocarbon	A	U	U	U	A
Tetrachloroethylene	A	U	U	B	A
Tetraethyl Lead	A	U	-	B	A
Tetrafluoromethane (FREON 14)	B	-	-	-	A
Tetrahydrofuran	A	U	U	U	U
Tetralin	A	U	U	A	U
Tetramethyl Ammonium Hydroxid	A	-	-	-	A
Tetramethyldihydropyridin	A	-	-	-	-
Tetraphosphoglucosate	A	-	-	-	-
Tetraphosphoric Acid	A	-	-	-	-
Therminol 55	A	-	-	-	-
Therminol 66	A	-	-	-	-
Therminol FR	A	-	-	-	-
Thioamyl Alcohol	A	-	-	-	-
Thioethanol	A	-	-	-	-
Thioglycolic Acid	A	-	-	-	-
Thionylchloride	A	B	U	U	A
Thiophene	A	U	U	U	B
Thiophosphoryl Chloride	A	-	-	-	-
Thiourea	A	-	-	-	-
Thorium Nitrate	A	A	-	-	-
Tin Ammonium Chloride	A	A	-	-	A
Tin Chloride	A	A	-	-	-
Tin Tetrachloride	A	A	-	-	-
Titanic Acid	A	-	-	-	-
Titanium Dioxide	A	-	-	-	-
Titanium Sulphate	A	A	-	-	A
Titanium Tetrachloride	A	B	U	B	B
Toluene	A	U	U	B	B
Toluene Bisodium Sulfite	A	-	-	-	A
Toluene Diisocyanate (TDI)	A	B	U	U	-
Toluene Sulphonyl Chloride	A	-	-	-	U
Toluenesulphonic Acid	A	-	-	-	-
Toluidine	A	-	-	-	-
Toluquinone	A	-	-	-	-
Tolylaldehyde	A	-	-	-	-

Chemical	Isolast [®]	EPDM	VMQ	FVMQ	FKM
Transformer Oil	A	U	B	A	-
Transmission Fluid Type A	A	U	B	A	A
Triacetin	A	A	-	U	A
Triaryl Phosphate	A	A	C	B	U
Tribromomethylbenzene	A	-	-	-	A
Tributoxyethyl Phosphate	A	A	-	B	-
Tributyl Citrate	A	-	-	-	A
Tributyl Mercaptan	A	U	U	C	-
Tributyl Phosphate	A	B	U	U	A
Tributylamine	A 9503	-	-	-	U
Trichloroacetic Acid	A 8325	B	U	U	C
Trichloroacetyl Chloride	A	-	-	-	C
Trichlorobenzene	A	U	U	U	A
Trichloroethane	A	U	U	B	-
Trichloroethanolamine	A 9503	-	-	-	A
Trichloroethylene	A	U	U	B	-
Trichlorofluoromethane (FREON 11)	B	-	-	-	A
Trichloromethane	A	U	U	B	B
Trichloronitromethane	A	-	-	-	-
Trichlorophenylsilane	A	-	-	-	-
Trichloropropane	A	-	-	-	-
Trichlorotrifluoroethane (FREON 113)	B	-	-	-	-
Tricresyl Phosphate	A	U	C	B	A
Triethanolamine (TEA)	A 9503	A	-	U	U
Triethyl Phosphate	A	-	-	-	-
Triethylaluminum	A	C	-	-	B
Triethylamine	A 9503	-	-	-	-
Triethylborane	A	C	-	-	A
Triethylene Glycol	A	-	-	-	-
Triethylenetetramine	A 9503	-	-	-	-
Trifluoroacetic Acid	B 8325	-	-	-	-
Trifluorochloroethylene	B	-	-	-	-
Trifluoromethane (FREON 23)	B	-	-	-	-
Trifluorovinylchloride	A	-	-	-	-
Triisopropylbenzylchloride	A	-	-	-	-
Trimethylamine	A 9503	-	-	-	-
Trimethylbenzene	A	-	-	-	-
Trimethylpentane	A	-	-	-	-
Trinitrotoluene	A	U	-	B	B
Trioctyl Phosphate	A	A	C	B	B
Triphenylphosphite	A	-	-	-	-
Tripotassium Phosphate	A	-	-	-	-
Trisodium Phosphate	A	-	-	-	-
Tritium	A	A	-	-	A

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Chemical Compatibility Guide



Chemical	Isolast [®]	EPDM	VMQ	FVMQ	FKM
Tung Oil (China Wood Oil)	A	C	U	B	A
Tungsten Hexafluoride	B 8325	A	-	-	-
Tungstic Acid	A	A	-	-	-
Turbine Oils	A	U	U	B	A
Turpentine	A	U	U	B	A

U

Chemical	Isolast [®]	EPDM	VMQ	FVMQ	FKM
Ucon Lubricants/Fluids	A	-	-	-	-
Undecylenic Acid	A	-	-	-	-
Undecylic Acid	A	-	-	-	-
Unsymmetrical Dimethyl Hydrazin	A 9503	A	U	U	U
Uranium Hexafluoride	B	-	-	-	-
Uranium Sulphate	A	A	-	-	A
Uric Acid	A	-	-	-	-

V

Chemical	Isolast [®]	EPDM	VMQ	FVMQ	FKM
Valeraldehyde	A	-	-	-	-
Valeric Acid	A	-	-	-	-
Vanadium Oxide	A	-	-	-	-
Vanadium Pentoxide	A				
Vegetable Oils	A	C	B	A	A
Versilube F-50	A	A	C	A	A
Vinegar	A	A	A	C	A
Vinyl Acetate	A	-	-	-	-
Vinyl Benzene	A 9509	-	-	-	-
Vinyl Benzoate	A	-	-	-	-
Vinyl Chloride	A	U	-	-	A
Vinyl Fluoride	A	U	-	-	A
Vinylidene Chloride	A	-	-	-	-
Vinylpyridine	A	-	-	-	-
Vitriol (White)	A	-	-	-	-

W

Chemical	Isolast [®]	EPDM	VMQ	FVMQ	FKM
Wagner 21B Brake Fluid	A	A	C	U	U
Waste water	A	A	A	A	A

Chemical	Isolast [®]	EPDM	VMQ	FVMQ	FKM
Water (Cold)	A	A	A	A	A
Water (Hot)	A 9503	A	-	-	A
White Oil	A	U	U	A	A
Wine + Whiskey	A	A	A	A	A
Wood Alcohol (Methanol)	A	-	-	-	-
Wood Oil	A	U	U	B	A

X

Chemical	Isolast [®]	EPDM	VMQ	FVMQ	FKM
Xenon	A	A	-	-	A
Xylene	A	U	U	A	A
Xylidine (Di-methyl Aniline)	A	B	U	U	U

Z

Chemical	Isolast [®]	EPDM	VMQ	FVMQ	FKM
Zeolites	A	A	-	A	A
Zinc Acetate	A	A	U	U	A
Zinc Ammonium Chloride	A	A	-	-	A
Zinc Chloride	A	A	A	A	A
Zinc Chromate	A	A	A	A	A
Zinc Cyanide	A	A	A	A	A
Zinc Diethyldithiocarbamate	A	A	-	-	-
Zinc Dihydrogen Phosphate	A	A	-	-	-
Zinc Fluorosilicate	A	A	A	A	A
Zinc Hydrosulphite	A	A	-	-	A
Zinc Naphthenate	A	A	-	-	A
Zinc Nitrate	A	A	A	A	A
Zinc Oxide	A	A	A	A	A
Zinc Phenolsulphonate	A	-	-	-	-
Zinc Phosphate	A	A	A	A	A
Zinc Salts	A	A	A	A	A
Zinc Silicofluoride	A	-	-	-	A
Zinc Stearate	A	A	A	A	A
Zinc Sulphate	A	A	A	A	A
Zinc Sulphide	A	A	A	A	A
Zirconium Nitrate	A	A	-	-	-



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