

EPDM & FKM Chemical Resistance Guide



SECOND EDITION

EPDM & FKM CHEMICAL RESISTANCE GUIDE

Elastomers:
Ethylene Propylene (EPDM)
Fluorocarbon (FKM)



IPEX
by aliaxis

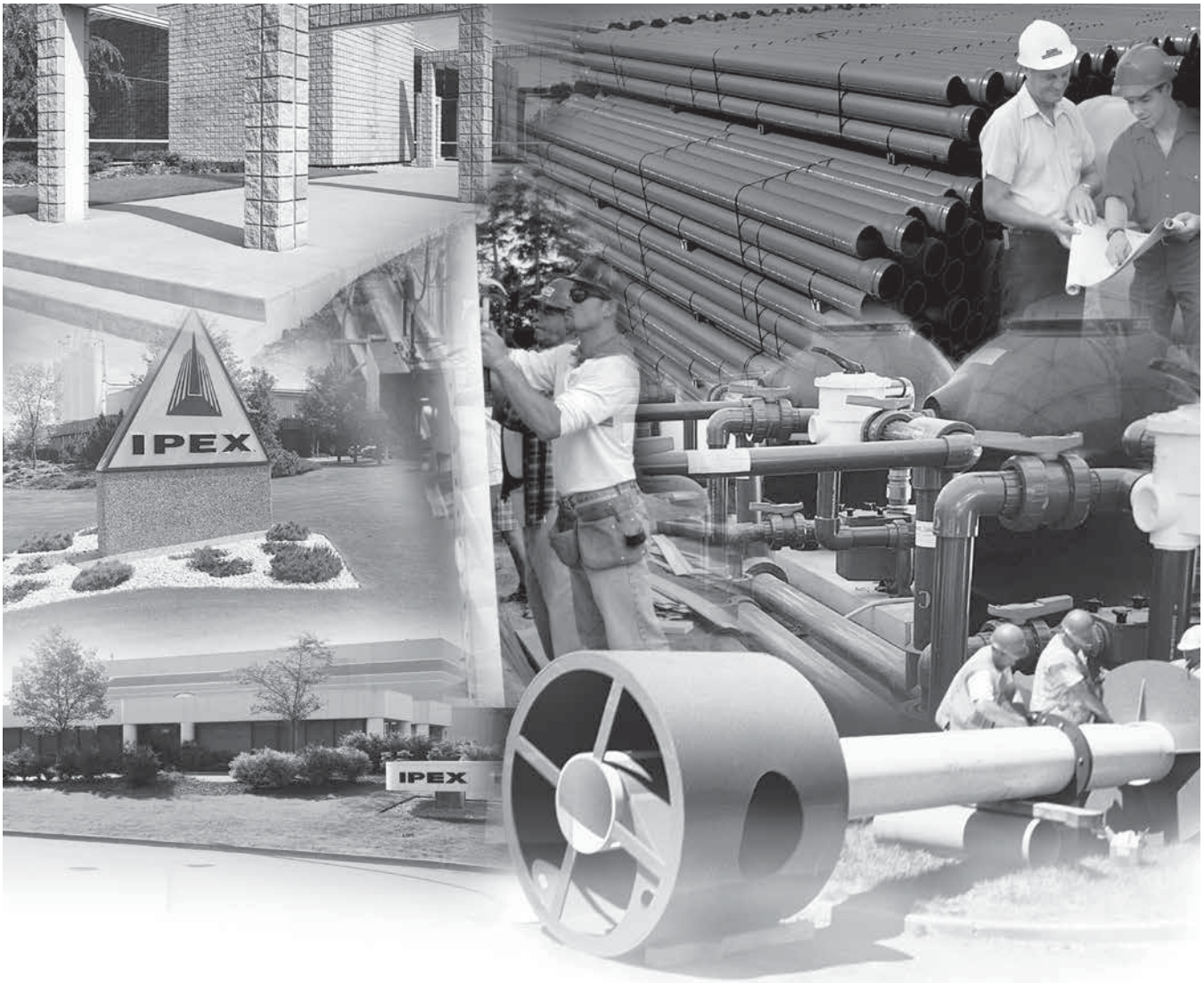
Chemical Resistance Guide

Ethylene Propylene (EPDM) & Fluorocarbon (FKM)

2nd Edition

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ABOUT IPEX

At IPEX, we have been manufacturing non-metallic pipe and fittings since 1951. We formulate our own compounds and maintain strict quality control during production. Our products are made available for customers thanks to a network of regional stocking locations from coast-to-coast. We offer a wide variety of systems including complete lines of piping, fittings, valves and custom-fabricated items.

More importantly, we are committed to meeting our customers' needs. As a leader in the plastic piping industry, IPEX continually develops new products, modernizes manufacturing facilities and acquires innovative process technology. In addition, our staff take pride in their work, making available to customers their extensive thermoplastic knowledge and field experience. IPEX personnel are committed to improving the safety, reliability and performance of thermoplastic materials. We are involved in several standards committees and are members of and/or comply with the organizations listed on this page.

For specific details about any IPEX product, contact our customer service department.

INTRODUCTION

Elastomers have outstanding resistance to a wide range of chemical reagents. Selecting the correct elastomer for an application will depend on the chemical resistance, temperature and mechanical properties needed.

Resistance is a function both of temperatures and concentration, and there are many reagents which can be handled for limited temperature ranges and concentrations. In borderline cases, it will be found that there is limited attack, generally resulting in some swelling due to absorption. Resistance is often affected (and frequently reduced) when handling a number of chemicals or compounds containing impurities. For this reason, when specific applications are being considered, it may be worthwhile to carry out tests using the actual product that will be encountered in service. The listing that follows does not address chemical combinations.

The information is based on immersion tests on unstressed coupons, experiments and, when available, actual process experience as well as data from tests inclusive of stress from temperature and pressure. The end user should be aware of the fact that actual service conditions will affect the chemical resistance.

Chemical resistance data from immersion tests cannot be unconditionally applied to elastomer components subjected to high levels of continuous or frequent mechanical or thermal stresses.

When the elastomer will be subject to a continuous applied mechanical or thermal stress, or to combinations of chemicals, testing that duplicates the expected field conditions, as closely as possible, should be performed on representative samples of the elastomer product to properly evaluate the elastomer for use in this application.

RATINGS

Ratings are according to the product and suppliers.

The absence of any class indication for any given materials, signifies the absence of data for such material(s) with respect to the specific chemical(s), temperature(s) and concentration(s).

Note: Chemical resistance data is found in a laboratory setting and cannot account for all possible variables of an installed application. It is up to the design engineer or final user to use this information as guidance for a specific application design.

If a material is chemically resistant to the concentrated form of a specific chemical, it should be resistant to the diluted form of that same chemical.

IMPORTANT NOTICE

Before you select or use any product or system, it is important that you analyze all aspects of your application and review the information concerning the product in the current product catalog. The user, through its own analysis and testing, is solely responsible for making the final selection of the system and components and assuring that all performance, safety and warning requirements of the application are met.

Please, note that this publication is only a guide to be used for initial information on the material to be selected. No guarantee can be given in respect of the listed data. IPEX reserves the right to make any modification whatsoever, based upon further researches and experiences.

NOTES

ETHYLENE PROPYLENE (EPDM) & FLUOROCARBON (FKM)

All Chemical Resistance data for Ethylene Propylene (EPDM) and Fluorocarbon (FKM) contained within this manual has been obtained from FIP S.p.A.

Resistance data was obtained from FIP's online Chemical Resistance Guide.

Compound Compatibility Rating

Four different classes of chemical resistance are used in this guide i.e.:

1	High Resistance All material belonging to this class are completely or almost completely corrosion proof against the conveyed fluid according to the specified operating conditions
2	Limited Resistance The materials belonging to this class are partially attacked by the conveyed chemical compound. The average life of the material is therefore shorter, and it is advisable to use a higher safety factor the one adopted for Class 1 materials
3	No Resistance All material belonging to this class are subject to corrosion by the conveyed fluid and they should therefore not be used
	Insufficient Data The absence of any class indication means that no data are available

The materials belonging to this class are completely resistant against the conveyed fluid according to the specified operating conditions.

Chemical resistance for EPDM and FKM applies to IPEX valves and fittings using EPDM and FKM seals.

Legend:

%	Concentration	Dil	Diluted Solution
Sat	Saturated Solution	All	All the Concentration
Conc	Concentrated	Tech.P	Technically Pure
Nd	Undefined Concentration	Sol.Aq	Aqueous Solution
Comm	Commercial Solution	Emu.Aq	Aqueous Emulsion

ETHYLENE PROPYLENE (EPDM) CHEMICAL RESISTANCE DATA

Name	Concentration %	Formula	Temperature					
			68°F (20°C)	104°F (40°C)	140°F (60°C)	176°F (80°C)	212°F (100°C)	248°F (120°C)
A								
Acetaldehyde	Sol.Aq (40%)	CH ₃ CHO	1	1	2			
Acetaldehyde	Tech.P (100%)	CH ₃ CHO	1	2	3			
Acetic Acid	Glacial (100%)	CH ₃ COOH	3					
Acetic Acid	Sol.Aq (10%)	CH ₃ COOH	1	1	2	2	3	
Acetic Acid	Sol.Aq (30%)	CH ₃ COOH	1	1	2			
Acetic Acid	Sol.Aq (60%)	CH ₃ COOH	1	2	3	3	3	
Acetic Acid	Sol.Aq (80%)	CH ₃ COOH	2	2	3	3	3	
Acetic Acid Anhydride	Tech.P (100%)	(CH ₃ CO) ₂ O	2	2	3			
Acetone	Sol.Aq (10%)	CH ₃ COCH ₃	1	1	2	2	3	
Acetone	Tech.P (100%)	CH ₃ COCH ₃	1	1	2	2	3	
Acetonitrile		CH ₃ CN	2	3				
Acetophenone	Tech.P (Nd%)	CH ₃ COC ₆ H ₅	1	1	2	2		
Acetyl Acetone		CH ₃ COCH ₂ COCH ₃	3					
Acetylene		C ₂ H ₂	2	3	3			
Acrylonitrile	Tech.P (100%)	CH ₂ =CH-CN	2	3				
Adipic Acid	Sol.Aq (Sat%)	HOOC(CH ₂) ₄ COOH	1	1	1	2	3	
Alcoholic Spirit			1					
Allyl Alcohol	Sol.Aq (96%)	CH ₂ =CH-CH ₂ OH	1	1	2	3		
Allyl Chloride		CH ₂ =CHCH ₂ Cl	3	3				
Alum	Sol.Aq (Dil%)	Al ₂ (SO ₄) ₃ ·K ₂ SO ₄ ·4H ₂ O	1	1	1	2		
Alum	Sol.Aq (Sat%)	Al ₂ (SO ₄) ₃ ·K ₂ SO ₄ ·4H ₂ O	1	1	1	2	2	
Aluminium Acetate	Sol.Aq (Sat%)	(CH ₃ COO) ₃ Al	1	1	1	1		
Aluminium Bromide	Sol.Aq (Sat%)	AlBr ₃	1	1	1			
Aluminium Chloride	Sol.Aq (All%)	AlCl ₃	1	1	1	2	3	
Aluminium Fluoride	Sol.Aq (Sat%)	AlF ₃	1	1	1	1	3	
Aluminium Hydroxide	Sol.Aq (All%)	Al(OH) ₃	1	1	1	2	2	
Aluminium Nitrate	Sol.Aq (Sat%)	Al(NO ₃) ₃	1	1	1	2	3	
Aluminium Sulfate	Sol.Aq (10%)	Al ₂ (SO ₄) ₃	1	1	1			
Aluminium Sulfate	Sol.Aq (Sat%)	Al ₂ (SO ₄) ₃	1	1	1	2	3	
Ammonia	Sol.Aq (Dil%)	NH ₃	1	1	1	1		
Ammonia	Sol.Aq (Sat%)	NH ₃	2	2	2	1		
Ammonia Gas	Tech.P (100%)	NH ₃	1	1	1	2	3	
Ammonium Acetate	Sol.Aq (Sat%)	CH ₃ COONH ₄	1	1	1	2	3	
Ammonium Bifluoride	Sol.Aq (Sat%)	NH ₄ FHF	1	1	1	2	2	
Ammonium Carbonate	Sol.Aq (100%)	(NH ₄) ₂ CO ₃	1	1	1	2	3	
Ammonium Chloride	Sol.Aq (Sat%)	NH ₄ Cl	1	1	1	2	3	
Ammonium Fluoride	Sol.Aq (25%)	NH ₄ F	1	1	1			
Ammonium Hydroxide	Sol.Aq (Dil%)	NH ₄ OH	1	1	1	2	3	

1 – High Resistance

2 – Limited Resistance

3 – No Resistance

□ (blank) – Insufficient Data

ETHYLENE PROPYLENE (EPDM) CHEMICAL RESISTANCE DATA

Name	Concentration %	Formula	Temperature					
			68°F (20°C)	104°F (40°C)	140°F (60°C)	176°F (80°C)	212°F (100°C)	248°F (120°C)
Ammonium Hydroxide	Sol.Aq (Sat%)	NH4OH	1	1	1	2	3	
Ammonium Metaphosphate	Sol.Aq (All%)	(NH4)4P4O12	1	1	1	1		
Ammonium Nitrate	Sol.Aq (Sat%)	NH4NO3	1	1	1	1	3	
Ammonium Persulfate	Sol.Aq (All%)	(NH4)2S2O8	1	1				
Ammonium Phosphate			1	1	1	2	3	
Ammonium Sulfate	Sol.Aq (All%)	(NH4)2SO4	1	1	1	1	3	
Ammonium Sulfhydrate	Sol.Aq (Dil%)	NH4OH(NH4)2SO4	1	1	2	2	3	
Ammonium Sulfhydrate	Sol.Aq (Sat%)	NH4OH(NH4)2SO4	1	1	2	2	3	
Ammonium Sulfide	Sol.Aq (10%)	(NH4)2S	1	1	1	1		
Ammonium Sulfide	Sol.Aq (Sat%)	(NH4)2S	1	1	1	1		
Amyl Acetate	Tech.P (100%)	CH3COO(CH2)4CH3	1	2	3			
Amyl Alcohol		CH3(CH2)3CH2OH	1	1	1	2	3	
Amyl Borate	Tech.P (100%)	(C5H11)3BO3	2					
Amyl Chloride	Tech.P (100%)	CH3(CH2)4Cl	3					
Aniline	Tech.P (100%)	C6H5NH2	1	2	2	2	3	
Aniline Chlorhydrate	Sol.Aq (Sat%)	C6H5NH2HCl	1	1	1	1	1	
Anthraquinone Sulfonic Acid			1					
Antimony Trichloride	Sol.Aq (90%)	SbCl3	1	2	2	3		
Aqua Regia		3HCl+1HNO3	3					
Arsenic Acid		H3ASO4	1	1	1	2	3	
Asphalt			3					
B								
Barium Carbonate	Sol.Aq (All%)	BaCO3	1	1	1	1		
Barium Chloride	Sol.Aq (All%)	BaCl2	1	1	1	1		
Barium Hydroxide	Sol.Aq (Sat%)	Ba(OH)2	1	1	1	1		
Barium Nitrate	Sol.Aq (Sat%)	Ba(NO3)2	1	1	1	1	2	
Barium Sulfate	Sol.Aq (Sat%)	BaSO4	1	1	1	1		
Barium Sulfide	Sol.Aq (Sat%)	BaS	1	1	1	1		
Beer			1	1	1	1		
Benzaldehyde	Sol.Aq (Sat%)	C6H5CHO	1	1	2	3		
Benzene	Tech.P (100%)	C6H6	3					
Benzene Chloride	Tech.P (100%)	C6H5Cl	3					
Benzene Sulfonic Acid	Sol.Aq (10%)	C6H5SO3H	3					
Benzene+Benzine			3	3				
Benzine (Free Of Pb & Aromatic)	Tech.P (100%)	C5H12÷C12H26	3					

1 – High Resistance

2 – Limited Resistance

3 – No Resistance

□ (blank) – Insufficient Data

ETHYLENE PROPYLENE (EPDM) CHEMICAL RESISTANCE DATA

Name	Concentration %	Formula	Temperature					
			68°F (20°C)	104°F (40°C)	140°F (60°C)	176°F (80°C)	212°F (100°C)	248°F (120°C)
Benzoic Acid	Sol.Aq (Sat%)	C6H5COOH	2	3	3			
Benzyl Alcohol	Tech.P (100%)	C6H5CH2OH	1	2	2	3		
Benzyl Chloride	Tech.P (100%)	C6H5CH2Cl	3					
Bleaching Lye		NaClO+NaCl	2					
Borax	Sol.Aq (All%)	Na2B4O7	1	1	1	2		
Boric Acid	Sol.Aq (Sat%)	H3BO3	1	1	1	2	3	
Brine			1	1	1	1	1	
Bromic Acid		HBrO3						
Bromine Water		Br2+H2O	3					
Bromine,Liquid	Tech.P (100%)	Br2	3					
Bromine,Vapours		Br2	3					
Butadiene	Gas (100%)	CH2=CH-CH=CH2	3					
Butane Gas		CH3CH2CH2CH3	3					
Butanediol	Sol.Aq (10%)	CH3CH2CHOHCH2OH	1	1	2	3		
Butanediol	Sol.Aq (Conc%)	CH3CH2CHOHCH2OH						
Butyl Acetate	Tech.P (100%)	CH3COOCH2CH2CH2CH3	2	3	3			
Butyl Acrylate	Tech.P (100%)	CH2=CHCOOC4H9	2					
Butyl Alcohol	Tech.P (100%)	CH3(CH2)3OH	1	1	1	1		
Butyl Amine	Sol.Aq (Sat%)	CH3(CH2)3NH2	3					
Butyl Ether	Tech.P (100%)	[CH3(CH2)3]2O	3					
Butyl Phenol	Tech.P (100%)	C4H9C6H4OH	3					
Butyl Phthalate	Tech.P (100%)	HOCC6H4COOC4H9	2	2	2	3		
Butylene	Liquid (100%)	CH2=CH-CH2CH3	3					
Butylene	Tech.P (100%)	CH2=CH-CH2CH3	3					
Butylene Glycol	Tech.P (100%)	CH2OH-CH=CH-CH2OH	2	1	1			
Butyric Acid	Sol.Aq (20%)	CH3CH2CH2COOH	2	3				
Butyric Acid	Tech.P (100%)	CH3CH2CH2COOH	2	3				
C								
Calcium Acetate	Sol.Aq (Sat%)	Ca(CH3COO)2	1	1	2	3	3	
Calcium Bisulfite	Sol.Aq (Sat%)	Ca(HSO3)2	1	1	2	3	3	
Calcium Carbonate	Sol.Aq (All%)	CaCO3	1	1	2	3	3	
Calcium Chlorate	Sol.Aq (Sat%)	Ca(ClO3)2	1	1	2	2	3	
Calcium Chloride	Sol.Aq (All%)	CaCl2	1	1	1	2	3	
Calcium Hydroxide	Sol.Aq (All%)	Ca(OH)2	1	1	1	1		
Calcium Hypochlorite	Sol.Aq (Sat%)	Ca(ClO)2	1	1	2	2		
Calcium Nitrate	Sol.Aq (50%)	Ca(NO3)2	1	1	1	2	3	
Calcium Sulfate	Sol.Aq (Sat%)	CaSO4	1	1	1	2	3	

1 – High Resistance

2 – Limited Resistance

3 – No Resistance

□ (blank) – Insufficient Data

ETHYLENE PROPYLENE (EPDM) CHEMICAL RESISTANCE DATA

Name	Concentration %	Formula	Temperature					
			68°F (20°C)	104°F (40°C)	140°F (60°C)	176°F (80°C)	212°F (100°C)	248°F (120°C)
Calcium Sulfide	Sol.Aq (Sat%)	CaS	1	1	1	1		
Camphor Oil			3					
Caprylic Acid	Tech.P (100%)	CH ₃ (CH ₂) ₆ COOH						
Carbon Dioxide	Gas (100%)	CO ₂	1	1	1	1	2	
Carbon Dioxide	Sol.Aq (Nd%)	CO ₂ +H ₂ O	1	1	1	1	2	
Carbon Disulfide	Tech.P (100%)	CS ₂	3					
Carbon Monoxid	Gas (100%)	CO	1	1	1	1		
Carbon Tetrachloride	Tech.P (100%)	CCl ₄	3					
Carbonic Acid	Sol.Aq (Sat%)	H ₂ CO ₃	1	1	1	1	3	
Castor Oil			2					
Chloramine	Sol.Aq (Dil%)	C ₆ H ₅ SO ₂ NNACl	1					
Chloric Acid	Sol.Aq (10%)	HClO ₃	1	1	2	2	3	
Chloric Acid	Sol.Aq (20%)	HClO ₃	1	1	2	3		
Chlorine	Gas (10%)	Cl ₂						
Chlorine	Gas (100%)	Cl ₂	3	3				
Chlorine Dioxide	Tech.P (100%)	ClO ₂						
Chlorine Gas	Humid (All%)	Cl ₂	3					
Chlorine Liquid	Tech.P (100%)	Cl ₂	3					
Chlorine Water		Cl ₂ +H ₂ O	1					
Chloro Benzene	Tech.P (100%)	C ₆ H ₅ Cl	3					
Chloro Sulfonic Acid	Tech.P (100%)	HCISO ₃	3					
Chlorobiphenyl	Tech.P (100%)	C ₆ H ₅ C ₆ H ₄ Cl	3					
Chloroform	Tech.P (100%)	CHCl ₃	3					
Chrome Alum		KCr(SO ₄) ₂	1					
Chrome Alum	Sol.Aq (Sat%)	KCr(SO ₄) ₂	1	1	1	2		
Chromic Acid	Sol.Aq (10%)	CrO ₃ +H ₂ O	2	2	3			
Chromic Acid	Sol.Aq (30%)	CrO ₃ +H ₂ O	1	1				
Chromic Acid	Sol.Aq (50%)	CrO ₃ +H ₂ O	2	2				
Citric Acid	Sol.Aq (50%)	C ₃ H ₄ (OH)(COOH) ₃	1	1	1	2	3	
Compressed Air W/Oil			3					
Copper Acetate		Cu(COOCH ₃) ₂	1	1	1			
Copper Borofluoride	Sol.Aq (Nd%)	CuBF ₄	1	1	1	1	2	
Copper Carbonate	Sol.Aq (Sat%)	CuCO ₃	1	1	1	2		
Copper Chloride	Sol.Aq (Sat%)	CuCl ₂	1	1	1	1	2	
Copper Cyanide	Sol.Aq (All%)	Cu(CN) ₂	1	1	1	2		
Copper Fluoride	Sol.Aq (All%)	CuF ₂	1	1				
Copper Nitrate	Sol.Aq (Nd%)	Cu(NO ₃) ₂	1	1	1	1		
Copper Sulfate	Sol.Aq (Dil%)	CuSO ₄	1	1	1	2		

1 – High Resistance

2 – Limited Resistance

3 – No Resistance

□ (blank) – Insufficient Data

ETHYLENE PROPYLENE (EPDM) CHEMICAL RESISTANCE DATA

Name	Concentration %	Formula	Temperature					
			68°F (20°C)	104°F (40°C)	140°F (60°C)	176°F (80°C)	212°F (100°C)	248°F (120°C)
Copper Sulfate	Sol.Aq (Sat%)	CuSO ₄	1	1	1	1	2	
Cottonseed Oil			2					
Cresol	Sol.Aq (>=90%)	CH ₃ C ₆ H ₄ OH	3					
Cresol	Sol.Aq (Dil%)	CH ₃ C ₆ H ₄ OH	3	3				
Croton Aldehyde	Tech.P (100%)	CH ₃ -CH=CH-CHO	1	1	2	2	3	
Cryolite	Sol.Aq (Sat%)	Na ₃ AlF ₆	3					
Cyclohexane	Tech.P (100%)	C ₆ H ₁₂	3	3				
Cyclohexanol	Tech.P (100%)	C ₆ H ₁₁ OH	3					
Cyclohexanone	Tech.P (100%)	C ₆ H ₁₀ O	2	2	3			
D								
Decalin (Decahydronaftalene)	Tech.P (100%)	C ₁₀ H ₁₈	3					
Detergents	Sol.Aq (Comm%)		1	1	1			
Dextrine			1	1	1	1	2	
Dextrose	Sol.Aq (All%)	C ₆ H ₁₂ O ₆	1	1	1	1		
Di-Isobutyl Ketone	Tech.P (100%)	(CH ₃) ₂ CHCH ₂ COCH ₂ CH(CH ₃)	1	1	2	3		
Di-Isopropyl Ketone	Tech.P (100%)	[(CH ₃) ₂ CH] ₂ CO	1					
Diacetone Alcohol	Tech.P (100%)	(CH ₃) ₂ COHCH ₂ COCH ₃	1	1				
Dibutyl Amine	Tech.P (100%)	(C ₄ H ₉) ₂ NH	3					
Dibutyl Ether	Tech.P (100%)	[CH ₃ (CH ₂) ₃] ₂ O	3	3				
Dibutyl Phthalate	Tech.P (100%)	C ₆ H ₄ (COOC ₄ H ₉) ₂	2	2	2	3		
Dibutyl Sebacate	Tech.P (100%)	C ₈ H ₁₆ (COOC ₄ H ₉) ₂	1					
Dichloro Benzene	Tech.P (100%)	C ₆ H ₄ Cl ₂	3					
Dichloroacetic Acid	Sol.Aq (50%)	Cl ₂ CHCOOH	2	2	3			
Dichloroacetic Acid	Tech.P (100%)	Cl ₂ CHCOOH	2					
Dichloroacetic Acid Methyl Ester	Tech.P (100%)	Cl ₂ CHCOOCH ₃	1	2	3			
Dichloroethylene	Tech.P (100%)	CHCl=CHCl	3					
Diesel Oil			3					
Diethylamine	Tech.P (100%)	(C ₂ H ₅) ₂ NH	1	2	3			
Diethylether	Tech.P (100%)	C ₂ H ₅ OC ₂ H ₅	3					
Diglycolic Acid	Sol.Aq (Sat%)	HOOC-CH ₂ -OCH ₂ -COOH	1					
Diisobutylene	Tech.P (100%)	C ₈ H ₁₆	3					
Dimethyl Amine	Tech.P (100%)	(CH ₃) ₂ NH	2	2		3		
Dimethyl Formamide	Tech.P (100%)	HCON(CH ₃) ₂	1					
Dimethyl Phthalate	Tech.P (100%)	C ₆ H ₄ (COOCH ₃) ₂	1					

1 – High Resistance

2 – Limited Resistance

3 – No Resistance

□ (blank) – Insufficient Data

ETHYLENE PROPYLENE (EPDM) CHEMICAL RESISTANCE DATA

Name	Concentration %	Formula	Temperature					
			68°F (20°C)	104°F (40°C)	140°F (60°C)	176°F (80°C)	212°F (100°C)	248°F (120°C)
Dinonyl Phthalate	Tech.P (100%)	C ₆ H ₄ (COOC ₉ H ₁₉) ₂	2					
Diocetyl Phthalate	Tech.P (100%)	C ₆ H ₄ (COOC ₈ H ₁₇) ₂	2					
Dioxane	Tech.P (100%)	(CH ₂) ₄ O ₂	2	2	3			
E								
Epichlorohydrin	Tech.P (100%)	C ₃ H ₅ ClO	2					
Ethyl Acetate	Tech.P (100%)	CH ₃ COOCH ₂ CH ₃	2	2	2			
Ethyl Acetoacetate	Tech.P (100%)	CH ₃ COCH ₂ COOCH ₂ CH ₃	1	1				
Ethyl Acrylate	Tech.P (100%)	CH ₂ =CHCOOCH ₂ CH ₃	2					
Ethyl Alcohol	Sol.Aq (96%)	CH ₃ CH ₂ OH	1	1	1	2	3	
Ethyl Benzene	Tech.P (100%)	C ₆ H ₅ C ₂ H ₅	3					
Ethyl Chloride	Tech.P (100%)	CH ₃ CH ₂ Cl	2					
Ethyl Ether	Tech.P (100%)	CH ₃ CH ₂ OCH ₂ CH ₃	3					
Ethylene Chlorohydrin	Tech.P (100%)	ClCH ₂ CH ₂ OH	2	3				
Ethylene Diamina	Tech.P (100%)	NH ₂ CH ₂ CH ₂ NH ₂	1	2	2	3		
Ethylene Dichloride	Tech.P (100%)	CH ₂ ClCH ₂ Cl	3					
Ethylene Glycol	Tech.P (100%)	HOCH ₂ -CH ₂ OH	1	1	1	1	3	
Ethylene Oxide	Tech.P (100%)	C ₂ H ₄ O	3					
F								
Fatty Acids	Tech.P (100%)	R>C ₆	3					
Ferric Chloride	Sol.Aq (10%)	FeCl ₃	1	1	1	1	2	
Ferric Chloride	Sol.Aq (Sat%)	FeCl ₃	1	1	1	1	2	
Ferric Nitrate		Fe(NO ₃) ₃	1	1	1	2		
Ferric Sulfate	Sol.Aq (Sat%)	Fe ₂ (SO ₄) ₃	1	1	1	1		
Ferrous Chloride	Tech.P (Sat%)	FeCl ₂	1	1	1	1		
Ferrous Hydroxide	Tech.P (Sat%)	Fe(OH) ₂	1	1	1	1		
Ferrous Nitrate	Sol.Aq (Sat%)	Fe(NO ₂) ₂	1	1	1	1		
Ferrous Sulfate	Sol.Aq (Sat%)	FeSO ₄	1	1	1	1	2	
Fertilizer Salts	Sol.Aq (10%)		1	1	2	3		
Fertilizer Salts	Sol.Aq (Sat%)		1	1	2	3		
Fluoboric Acid		HF ₄	1	1	1	2		
Fluoboric Acid	Tech.P (100%)	HF ₄	1	1	1	2		
Fluorine Gas Dry		F ₂	3					
Fluosilicic Acid	Sol.Aq (32%)	H ₂ SiF ₆	1	2	2	3		
Formaldehyde	Sol.Aq (37%)	CH ₂ O	1	1	1	2		

1 – High Resistance

2 – Limited Resistance

3 – No Resistance

□ (blank) – Insufficient Data

ETHYLENE PROPYLENE (EPDM) CHEMICAL RESISTANCE DATA

Name	Concentration %	Formula	Temperature					
			68°F (20°C)	104°F (40°C)	140°F (60°C)	176°F (80°C)	212°F (100°C)	248°F (120°C)
Formamide	Tech.P (100%)	HCONH2	1	2	2	3		
Formic Acid	Sol.Aq (50%)	HCOOH	1	1	2	2	3	
Formic Acid	Tech.P (100%)	HCOOH	1	1	1	2	1	
Freon F-11	Tech.P (100%)	CCl3F	3					
Freon F-113	Tech.P (100%)	CClF2-CCl2F	3					
Freon F-114	Tech.P (100%)	CClF2-CClF2	3					
Freon F-12	Tech.P (100%)	CCl2F2	2	3				
Freon F-21	Tech.P (100%)	CHCl2F	3					
Freon F-22	Tech.P (100%)	CHClF2	1	1	1			
Fructose	Sol.Aq (Sat%)	C6H12O6	1	1	1	1	3	
Fruit Pulp And Juice			1	1	1	1		
Fuel Oil			3					
Furfural	Tech.P (100%)	C5H4O2	1	1	1	1	3	
Furfural Alcohol		C5H3OCH2OH	2	2	3			
Furfuryl Alcohol	Tech.P (100%)	C5H6O2	2	2	3			
G								
Gallic Acid	Sol.Aq (Sat%)	(OH)3C6H2COOH	1					
Gas Exhaust Acid			1					
Gas Exhaust With Nitrous Vapours			2					
Gas Illuminating	Tech.P (100%)		1					
Gas Natural			3					
Gelatine			1	1	1	2	2	
Gin			1	1	1	1		
Glucose	Sol.Aq (All%)	C6H12O6	1	1	1	1		
Glycerine	Sol.Aq (All%)	C3H5(OH)3	1	1	1	1		
Glycocoll	Sol.Aq (10%)	NH2CH2COOH	1	1	2	2		
Glycolic Acid	Sol.Aq (37%)	HOCH2COOH	1	1	1	2	3	
H								
Heptane	Tech.P (100%)	C7H16	3					
Hexane	Tech.P (100%)	C6H14	3					
Hydrazine	Tech.P (100%)	NH2-NH2	1					
Hydrazine Hydrate	Sol.Aq (Dil%)	NH2-NH2-H2O	1	2	2	3		
Hydriodic Acid	Sol.Aq (Sat%)	HI	1	1				

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ETHYLENE PROPYLENE (EPDM) CHEMICAL RESISTANCE DATA

Name	Concentration %	Formula	Temperature					
			68°F (20°C)	104°F (40°C)	140°F (60°C)	176°F (80°C)	212°F (100°C)	248°F (120°C)
Hydrobromic Acid		HBr	1	1	1	1	3	
Hydrochloric Acid	Gas (100%)	HCl	1	1	1			
Hydrochloric Acid	Sol.Aq (10%)	HCl	1	1	2			
Hydrochloric Acid	Sol.Aq (30%)	HCl	2	2	3			
Hydrochloric Acid	Sol.Aq (5%)	HCl	1	2	2			
Hydrochloric Acid	Sol.Aq (Sat%)	HCl	2	3	3			
Hydrocyanic Acid	Sol.Aq (Dil%)	HCN	1	1	2	3		
Hydrocyanic Acid		HCN	1	1	2	3		
Hydrofluoric Acid	Sol.Aq (10%)	HF	1	1	1	2	2	
Hydrofluoric Acid	Sol.Aq (40%)	HF	1	2	2	2		
Hydrofluoric Acid	Sol.Aq (70%)	HF	2					
Hydrogen Gas		H ₂	1	1	1	2	2	
Hydrogen Peroxide	Sol.Aq (10%)	H ₂ O ₂	1	2	2	3		
Hydrogen Peroxide	Sol.Aq (50%)	H ₂ O ₂	3					
Hydrogen Peroxide	Sol.Aq (90%)	H ₂ O ₂	3					
Hydrogen Sulfide	Sol.Aq (Sat%)	H ₂ S	1	2	3	1		
Hydrogen Sulfide Dry		H ₂ S	1	2	3	2		
Hydrogen Sulhide Water	Sol.Aq (Sat%)	H ₂ S	1	2	2			
Hydroquinone	Sol.Aq (Sat%)	C ₆ H ₄ O ₂	2	2	3			
Hydrosulphite	Sol.Aq (<=10%)		1					
Hydroxylamine Sulphate	Sol.Aq (All%)	(NH ₂ OH) ₂ -H ₂ SO ₄	1	1				
Hypochlorous Acid	Sol.Aq (10%)	HClO	1	2				
Iodine Dry And Wet		I ₂	3					
I								
Iodine Tincture		I ₂						
Iso-Octane		C ₈ H ₁₈	3					
Isobutyl Alcohol	Tech.P (100%)	(CH ₃) ₂ CHCH ₂ OH	1					
Isopropyl Acetate	Tech.P (100%)	CH ₃ COOCH(CH ₃) ₂	1	1	1			
Isopropyl Alcohol	Tech.P (100%)	(CH ₃) ₂ CHOH	1	1	2	3		
Isopropyl Chloride		(CH ₃) ₂ CHCl	3					
Isopropyl Ether	Tech.P (100%)	(CH ₃) ₂ CHOCH(CH ₃) ₂	3					
K								
Kerosene			3					

1 – High Resistance

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□ (blank) – Insufficient Data

ETHYLENE PROPYLENE (EPDM) CHEMICAL RESISTANCE DATA

Name	Concentration %	Formula	Temperature					
			68°F (20°C)	104°F (40°C)	140°F (60°C)	176°F (80°C)	212°F (100°C)	248°F (120°C)
L								
Lactic Acid	Sol.Aq (<=28%)	CH ₃ CHOHCOOH	1	1	1	2		
Lanoline			2	3				
Lard Oil			1	1	1			
Lead Acetate	Sol.Aq (Sat%)	Pb(CH ₃ COO) ₂	1	1	1	1		
Lead Chloride	Sol.Aq (Sat%)	PbCl ₂	1	1	1	1		
Lead Nitrate	Sol.Aq (Sat%)	Pb(NO ₃) ₂	1	1	1	1		
Lead Sulfate	Sol.Aq (Sat%)	PbSO ₄	1	1	1	1		
Linseed Oil			3					
Liqueurs			1	1	1			
Lithium Bromide	Sol.Aq (60%)	LiBr	1	1	1	2		
Lubricating Oils			3					
Lubricating Oils, Free Of Aromatic			3					
M								
Magnesium Carbonate	Sol.Aq (All%)	MgCO ₃	1	1	1	1		
Magnesium Chloride	Sol.Aq (Sat%)	MgCl ₂	1	1	1	1		
Magnesium Hydroxide	Sol.Aq (All%)	Mg(OH) ₂	1	1	1	1		
Magnesium Nitrate	Sol.Aq (Nd%)	Mg(NO ₃) ₂	1	1	1	1		
Magnesium Sulfate		MgSO ₄	1	1	1	1		
Maize Oil			3	2				
Maleic Acid	Sol.Aq (Sat%)	HOOC-CH=CH-COOH	1	1	2			
Malic Acid	Sol.Aq (Sat%)	HOOCCH ₂ CHOHCOOH	2					
Manganese Sulfate		MnSO ₄	1	1	1	1		
Mercuric Chloride	Sol.Aq (Sat%)	HgCl ₂	1	1	1			
Mercuric Cyanide	Sol.Aq (All%)	Hg(CN) ₂	1	2				
Mercuric Sulfate	Sol.Aq (Sat%)	HgSO ₄	1	1	1	1		
Mercurous Nitrate	Sol.Aq (Sat%)	HgNO ₃	1	1	1			
Mercury	Tech.P (100%)	Hg	1	1	1			
Methane		CH ₄	3	1	1	2		
Methanesulfonic Acid	Sol.Aq (50%)	CH ₃ SO ₃ H	1				3	
Methanesulfonic Acid	Tech.P (100%)	CH ₃ SO ₃ H	1				3	
Methyl Acetate	Tech.P (100%)	CH ₃ COOCH ₃	1	2				
Methyl Acrylate	Tech.P (100%)	CH ₂ =CHCOOCH ₃	1					
Methyl Alcohol	Tech.P (100%)	CH ₃ OH	1	1	1	1		
Methyl Amine	Sol.Aq (32%)	CH ₃ NH ₂	1	1	2			
Methyl Bromide	Tech.P (100%)	CH ₃ Br	3					

1 – High Resistance

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□ (blank) – Insufficient Data

ETHYLENE PROPYLENE (EPDM) CHEMICAL RESISTANCE DATA

Name	Concentration %	Formula	Temperature					
			68°F (20°C)	104°F (40°C)	140°F (60°C)	176°F (80°C)	212°F (100°C)	248°F (120°C)
Methyl Chloride	Tech.P (100%)	CH3Cl	2					
Methyl Ether		CH3OCH3	3					
Methyl Ethyl Ketone		CH3COCH2CH3	1	1	2	2		
Methyl Isobutyl Ketone		CH3COCH2CH3(CH3)2	1	2				
Methyl Isopropyl Ketone		CH3COCH(CH3)2	3					
Methylene Bromide		CH2Br2	3					
Methylene Chloride		CH2Cl2	3					
Methylene Iodine		CH2I2	3					
Milk			1	1	1	2		
Mineral Oil			3					
Mixed Acids(Chromic,Sulphuric)		H2CrO4/H2SO4/H2O	2	2				
Mixed Acids(Sulphuric,Nitric)		H2SO4/HNO3/H2O	2					
Mixed Acids(Sulphuric,Phosphoric)		H2SO4/H3PO4/H2O	1	1	1	2		
Molasses			1					
Monochloroacetic Acid	Sol.Aq (50%)	ClCH2COOH	1	1	2	3		
Monochloroacetic Acid Ethyl Ester	Tech.P (100%)	ClCH2COOCH2CH3	2	2	3			
Motor Oil			3					
N								
Naphtha			3					
Naphthalene	Tech.P (100%)	C10H8	3					
Nickel Acetate		(CH3COO)2Ni	1					
Nickel Chloride	Sol.Aq (All%)	NiCl2	1	1	1	1	3	
Nickel Nitrate	Sol.Aq (Sat%)	Ni(NO3)2	1	1	1	1	3	
Nickel Sulfate	Sol.Aq (Dil%)	NiSO4	1	1	1	1	3	
Nickel Sulfate	Sol.Aq (Sat%)	NiSO4	1	1	1	1	3	
Nicotine		C10H14N2						
Nicotinic Acid		C5H4NCOOH	1					
Nitric Acid	Sol.Aq (20%)	HNO3	3					
Nitric Acid	Sol.Aq (40%)	HNO3	3	3	3			
Nitric Acid	Sol.Aq (70%)	HNO3	3					
Nitric Acid	Tech.P (100%)	HNO3	3					
Nitrobenzene		C6H5NO2	2					
Nitroethane	Tech.P (100%)	CH3CH2NO2	2					
Nitromethane	Tech.P (100%)	CH3NO2	2					

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ETHYLENE PROPYLENE (EPDM) CHEMICAL RESISTANCE DATA

Name	Concentration %	Formula	Temperature					
			68°F (20°C)	104°F (40°C)	140°F (60°C)	176°F (80°C)	212°F (100°C)	248°F (120°C)
Nitrotoluene	Tech.P (100%)	CH3C6H4NO2	3					
Nitrous Acid	Sol.Aq (10%)	HNO2	1	2				
Nitrous Gases		NOx	1	1	2			
O								
Oleic Acid	Tech.P (100%)	C17H33COOH	3					
Oleum		H2SO4+SO3	3					
Oleum Vapours		H2SO4+SO3	3					
Olive Oil			2					
Oxalic Acid	Sol.Aq (10%)	HOCCOOH	1					
Oxalic Acid	Sol.Aq (Sat%)	HOCCOOH	1	1	1	3		
Oxygen		O2	1	1	1	1		
Ozone	Sol.Aq (Sat%)	O3	1	2	2			
Ozone Gas		O3	1	2				
P								
Palmitic Acid		CH3(CH2)14COOH	1					
Paraffin			3					
Paraffin Emulsions	Emu.Aq (Comm%)		3					
Paraffin Oil			3					
Peanut Oil			3					
Perchloric Acid	Sol.Aq (10%)	HClO4	1	2				
Perchloric Acid	Sol.Aq (70%)	HClO4	1	2				
Petroleum	Tech.P (100%)		3					
Petroleum Ether	Tech.P (100%)		3					
Phenol	Sol.Aq (1%)	C6H5OH	3					
Phenol	Sol.Aq (90%)	C6H5OH	3					
Phenylhydrazine	Tech.P (100%)	C6H5NHNH2	3					
Phenylhydrazine Hydrochloride	Sol.Aq (Sat%)	C6H5NHNH2HCl	1	1	2			
Phosgene Gas	Tech.P (100%)	COCl2		1	2			
Phosphoric Acid	Sol.Aq (25%)	H3PO4	1	1	1	1	2	
Phosphoric Acid	Sol.Aq (50%)	H3PO4	1	1	2	2		
Phosphoric Acid	Sol.Aq (85%)	H3PO4	1	1	1	2		
Phosphorous Penta-Trichloride	Tech.P (100%)	PCI5-PCI3	2					

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ETHYLENE PROPYLENE (EPDM) CHEMICAL RESISTANCE DATA

Name	Concentration %	Formula	Temperature					
			68°F (20°C)	104°F (40°C)	140°F (60°C)	176°F (80°C)	212°F (100°C)	248°F (120°C)
Phosphorous Pentoxide	Tech.P (100%)	P2O5	1	1	1			
Photographic Developer			1	1	2			
Photographic Emulsion			1	1	2			
Phthalic Acid	Sol.Aq (50%)	C6H4(COOH)2	1	1	2			
Phthalic Acid	Tech.P (100%)	C6H4(COOH)2	1	2				
Picric Acid	Sol.Aq (1%)	C6H2(OH)(NO2)3	1	1	1	2		
Plating Solutions,Cadmium			1					
Plating Solutions,Chrome			1					
Plating Solutions,Copper			1					
Plating Solutions,Gold			1					
Plating Solutions,Lead			1					
Plating Solutions,Nickel			1					
Plating Solutions,Rhodium			1	1				
Plating Solutions,Silver			1	1				
Plating Solutions,Tin			1	1	2			
Plating Solutions,Zinc			1					
Polyvinyl Acetate		[CH3COOCHCH2-]n	1					
Polyvinyl Alcohol	Tech.P (Nd%)	[-CH2CHOH-]n	1	1				
Potassium Acetate	Sol.Aq (Sat%)	CH3COOK	1					
Potassium Bicarbonate	Sol.Aq (Sat%)	KHCO3	1	1	1	1		
Potassium Bichromate	Sol.Aq (Sat%)	K2Cr2O7	1	1	1	1		
Potassium Bisulfate	Sol.Aq (Nd%)	KHSO4	1	1	1	1		
Potassium Borate	Sol.Aq (Sat%)	K3BO3	1	1	1			
Potassium Bromate	Sol.Aq (Sat%)	KBrO3	1	1	1	1	1	
Potassium Bromide	Sol.Aq (Sat%)	KBr	1	1	1	1	1	
Potassium Carbonate	Sol.Aq (Sat%)	K2CO3	1	1	1	1		
Potassium Chlorate	Sol.Aq (Sat%)	KClO3	1	1	1	1		
Potassium Chloride	Sol.Aq (Sat%)	KCl	1	1	1	1	1	
Potassium Chromate	Sol.Aq (Sat%)	K2CrO4	1	1	1	1		
Potassium Cyanide	Sol.Aq (Sat%)	KCN	1	1	1	1		
Potassium Ferricyanide	Sol.Aq (Sat%)	K4Fe(CN)6·3H2O	1	1	1			
Potassium Fluoride	Sol.Aq (Sat%)	KF	1	1	1	1		
Potassium Hydroxide	Sol.Aq (<=60%)	KOH	1	1	1	2		
Potassium Hypochlorite	Sol.Aq (Nd%)	KClO	1	1	1			
Potassium Iodide	Sol.Aq (Sat%)	KI	1	1	1	1		
Potassium Nitrate	Sol.Aq (Sat%)	KNO3	1	1	1	1		
Potassium Perborate	Sol.Aq (Nd%)	KBO3	1					
Potassium Perchlorate	Sol.Aq (Sat%)	KClO4	1	1	1			

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□ (blank) – Insufficient Data

ETHYLENE PROPYLENE (EPDM) CHEMICAL RESISTANCE DATA

Name	Concentration %	Formula	Temperature					
			68°F (20°C)	104°F (40°C)	140°F (60°C)	176°F (80°C)	212°F (100°C)	248°F (120°C)
Potassium Permanganate	Sol.Aq (10%)	KMnO ₄	1	1	2			
Potassium Permanganate	Sol.Aq (Sat%)	KMnO ₄	1	1	1			
Potassium Persulfate	Sol.Aq (Sat%)	K ₂ S ₂ O ₈	1	1	1	2		
Potassium Phosphates Acids	Sol.Aq (All%)	K ₂ HPO ₄ KH ₂ PO ₄	1	1	1	1		
Potassium Sulfate	Sol.Aq (Sat%)	K ₂ SO ₄	1	1	1	2		
Propane Gas		CH ₃ CH ₂ CH ₃	3					
Propane Liquid		CH ₃ CH ₂ CH ₃	3					
Propionic Acid	Sol.Aq (50%)	CH ₃ CH ₂ COOH	1	1	2			
Propyl Acetate	Tech.P (100%)	CH ₃ COOCH ₂ CH ₂ CH ₃	1					
Propyl Alcohol	Sol.Aq (97%)	C ₃ H ₇ OH	1	1	1	1		
Propylene Glycol	Tech.P (100%)	CH ₃ CHOHCH ₂ OH	1	1	1	1		
Propylene Oxide	Tech.P (100%)		2					
Pyridine	Tech.P (100%)	C ₅ H ₅ N	2	3	3			
S								
Silicic Acid	Sol.Aq (All%)	H ₂ SiO ₃	1	1	1	2		
Silicone Oil			1	1	1	2		
Silver Cyanide	Sol.Aq (All%)	AgCN	1	1	1	2		
Silver Nitrate	Sol.Aq (Sat%)	AgNO ₃	1	1	1	1		
Silver Sulfate	Sol.Aq (Sat%)	Ag ₂ SO ₄	1	1	1	1		
Soap,Aqueous Solution	Sol.Aq (All%)		1	1	1	1		
Sodium Acetate	Sol.Aq (Sat%)	CH ₃ COONa	1	1	1	1		
Sodium Alum	Sol.Aq (Sat%)	NaAl(SO ₄) ₂	1	1				
Sodium Benzoate		C ₆ H ₅ COONa	1	1	1	2		
Sodium Bicarbonate	Sol.Aq (Sat%)	NaHCO ₃	1	1	1	1		
Sodium Bichromate	Sol.Aq (Sat%)	Na ₂ Cr ₂ O ₇	1	1	1	1		
Sodium Bisulfate	Sol.Aq (10%)	NaHSO ₄	1	1	1	1		
Sodium Bisulfite	Sol.Aq (100%)	NaHSO ₃	1	1	1	1	2	
Sodium Borate	Sol.Aq (Sat%)	Na ₂ B ₄ O ₇	1	1	1	2		
Sodium Bromate	Sol.Aq (All%)	NaBrO ₃	1	1	1			
Sodium Bromide	Sol.Aq (Sat%)	NaBr	1	1	1			
Sodium Carbonate (Soda)	Sol.Aq (Sat%)	Na ₂ CO ₃	1	1	1	1		
Sodium Chlorate	Sol.Aq (All%)	NaClO ₃	1	1	1	2	3	
Sodium Chloride	Sol.Aq (Dil%)	NaCl	1	1	1	1	2	
Sodium Chloride	Sol.Aq (Sat%)	NaCl	1	1	1	1		
Sodium Chlorite	Sol.Aq (25%)	NaClO ₂	2					

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ETHYLENE PROPYLENE (EPDM) CHEMICAL RESISTANCE DATA

Name	Concentration %	Formula	Temperature					
			68°F (20°C)	104°F (40°C)	140°F (60°C)	176°F (80°C)	212°F (100°C)	248°F (120°C)
Sodium Chromate	Sol.Aq (Dil%)	Na ₂ CrO ₄	1	1	1			
Sodium Cyanide	Sol.Aq (All%)	NaCN	1	1	1	1	2	
Sodium Disulphite	Sol.Aq (All%)	Na ₂ S ₂ O ₅	1	1	1			
Sodium Ferrocyanide	Sol.Aq (Sat%)	Na ₄ FeCN ₆	2	1	1			
Sodium Fluoride	Sol.Aq (Sat%)	NaF	1	1	1			
Sodium Hydroxide	Sol.Aq (10%)	NaOH	1	1	1	2		
Sodium Hydroxide	Sol.Aq (30%)	NaOH	1	1	1	2		
Sodium Hydroxide	Sol.Aq (50%)	NaOH	1	1	1	2		
Sodium Hypochlorite	Sol.Aq (12.5%)	NaClO	2	2				
Sodium Hypochlorite	Sol.Aq (3%)	NaClO	1	2	3			
Sodium Hyposulphite	Sol.Aq (Nd%)	Na ₂ S ₂ O ₃						
Sodium Iodide	Sol.Aq (All%)	NaI	1	1	1			
Sodium Metasilicate	Sol.Aq (<5%)	Na ₂ SiO ₃	1	1	1	1	2	
Sodium Nitrate	Sol.Aq (Sat%)	NaNO ₃	1	1	1	1		
Sodium Nitrite	Sol.Aq (Sat%)	NaNO ₂	1	1	1	1		
Sodium Oxalate	Sol.Aq (Sat%)	Na ₂ C ₂ O ₄	1					
Sodium Perborate	Sol.Aq (All%)	NaBO ₃	1	1	1			
Sodium Perchlorate	Sol.Aq (Nd%)	NaClO ₄	1					
Sodium Peroxide		Na ₂ O ₂	1	1	1			
Sodium Persulphate	Sol.Aq (Sat%)	Na ₂ S ₂ O ₈	1	1	2			
Sodium Phosphate	Sol.Aq (Sat%)	Na ₃ PO ₄	1	1	1	1	1	
Sodium Phosphate Biacid	Sol.Aq (Sat%)	NaH ₂ PO ₄	1	1	1	1		
Sodium Phosphate Monoacid	Sol.Aq (Sat%)	Na ₂ HPO ₄	1	1	1	1		
Sodium Silicate	Sol.Aq (Sat%)	Na ₂ SiO ₃	1	1	1	1		
Sodium Sulfate	Sol.Aq (Sat%)	Na ₂ SO ₄	1	1	1	1		
Sodium Sulfide	Sol.Aq (Dil%)	Na ₂ S	1					
Sodium Sulfide	Sol.Aq (Sat%)	Na ₂ S	1	1	1	1		
Sodium Sulfite	Sol.Aq (Sat%)	Na ₂ SO ₃	1	1	1	1		
Sodium Thiocyanate	Sol.Aq (Nd%)	NaSCN	1	1	1			
Sodium Thiosulphate	Sol.Aq (Sat%)	Na ₂ S ₂ O ₃	1	1	1			
Stannic Chloride	Sol.Aq (Sat%)	SnCl ₄	1	1	1			
Stannous Chloride	Sol.Aq (Sat%)	SnCl ₂	1	1	1	2		
Stearic Acid	Tech.P (100%)	C ₁₇ H ₃₅ COOH	2					
Styrene		C ₆ H ₅ CH=CH ₂	3					
Succinic Acid		COOH(CH ₂) ₂ COOH	1	1	1	2		
Sugar Syrup			1					
Sulfamic Acid	Sol.Aq (20%)	HSO ₃ NH ₂	3					

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ETHYLENE PROPYLENE (EPDM) CHEMICAL RESISTANCE DATA

Name	Concentration %	Formula	Temperature					
			68°F (20°C)	104°F (40°C)	140°F (60°C)	176°F (80°C)	212°F (100°C)	248°F (120°C)
Sulphur		S	3					
Sulphur Chloride		S ₂ Cl ₂	3					
Sulphur Dichloride		SCl ₂	3					
Sulphur Dioxide	Sol.Aq (Sat%)	SO ₂	1					
Sulphur Dioxide Dry	Tech.P (100%)	SO ₂	1	1	2	2		
Sulphur Dioxide Liquid	Tech.P (100%)	SO ₂	1	1	2			
Sulphur Trioxide		SO ₃	3					
Sulphuric Acid	Sol.Aq (10%)	H ₂ SO ₄	1	1	1	1		
Sulphuric Acid	Sol.Aq (50%)	H ₂ SO ₄	2	2	2	2		
Sulphuric Acid	Sol.Aq (80%)	H ₂ SO ₄	3					
Sulphuric Acid	Sol.Aq (90%)	H ₂ SO ₄	3					
Sulphuric Acid	Sol.Aq (96%)	H ₂ SO ₄	3	3	3			
Sulphuric Acid	Sol.Aq (98%)	H ₂ SO ₄	3	3	3			
Sulphuric Acid	Tech.P (100%)	H ₂ SO ₄	3	3	3	3	3	
Sulphurous Acid	Sol.Aq (Sat%)	H ₂ SO ₃	1	2	2	3		
T								
Tallow Emulsion			1					
Tannic Acid	Sol.Aq (All%)	C ₁₄ H ₁₀ O ₉	1	1	1	2		
Tartaric Acid	Sol.Aq (All%)	COOH(CHOH) ₂ COOH	1	1	2	2	3	
Tetrachloroethane		CHCl ₂ CHCl ₂	3					
Tetrachloroethylene		Cl ₂ C=CCl ₂	3					
Tetraethyl Lead	Tech.P (100%)	Pb(C ₂ H ₅) ₄	3					
Tetrahydrofurane		(CH ₂) ₄ O	2	3				
Tetrahydronaphthalene		C ₁₀ H ₁₂	3					
Thionyl Chloride	Tech.P (100%)	SOCl ₂	3					
Thiophene		C ₄ H ₈ O	2					
Titanic Sulfate	Sol.Aq (Dil%)	Ti(SO ₄) ₂						
Titanous Sulfate	Sol.Aq (Dil%)	Ti ₂ (SO ₄) ₃						
Toluene	Tech.P (100%)	C ₆ H ₅ CH ₃	3					
Toluic Acid		CH ₃ C ₆ H ₄ COOH	3		2			
Transformer Oil			3					
Tributylphosphate	Tech.P (100%)	(C ₄ H ₉) ₃ PO ₄	3					
Trichlorethylene	Tech.P (100%)	ClCH=CCl ₂	3					
Trichloroacetic Acid	Sol.Aq (50%)	CCl ₃ COOH	2					
Trichloroacetic Acid	Tech.P (100%)	CCl ₃ COOH	2					
Trichloroethane	Tech.P (100%)	CH ₃ CCl ₃	3					

1 – High Resistance

2 – Limited Resistance

3 – No Resistance

□ (blank) – Insufficient Data

ETHYLENE PROPYLENE (EPDM) CHEMICAL RESISTANCE DATA

Name	Concentration %	Formula	Temperature					
			68°F (20°C)	104°F (40°C)	140°F (60°C)	176°F (80°C)	212°F (100°C)	248°F (120°C)
Tricresylphosphate	Tech.P (100%)	(CH ₃ C ₆ H ₄ O) ₃ PO ₄	1					
Triethanolamine	Tech.P (100%)	N(CH ₂ CH ₂ OH) ₃	1					
Triethylamine	Tech.P (100%)	N(CH ₂ CH ₃) ₃	3					
Trioctylphosphate	Tech.P (100%)	(C ₈ H ₁₇) ₃ PO ₄	1					
Turpentine Oil	Tech.P (100%)		3					
U								
Urea	Sol.Aq (33%)	NH ₂ CONH ₂	1	1	1	2		
Urea	Sol.Aq (<=10%)	NH ₂ CONH ₂	1	1	1	2		
Uric Acid	Sol.Aq (10%)	C ₅ H ₄ N ₄ O ₃						
Urine			1	1	1	2		
V								
Vaseline Oil			3	3				
Vegetable Oils And Fats			3					
Vinyl Acetate	Tech.P (100%)	CH ₂ =CHOOCCH ₃	2	3				
Vinyl Chloride	Tech.P (100%)	CH ₂ =CHCl	3					
W								
Water		H ₂ O	1	1	1	1		
Water, Demineralizate		H ₂ O	1	1	1	1	1	
Water, Potable		H ₂ O	1	1	1	1		
Water, Rain		H ₂ O	1	1	1	1	1	
Water, Salt		H ₂ O+NaCl	1	1	1	1		
Water, Sea			1	1	1	1	2	
Water, Condensed		H ₂ O	1	1	1	1		
Water, Distilled		H ₂ O	1	1	1	1	1	
Whisky			1	1	1	1		
White Liquor			1					
Wine Vinegar	Tech.P (Comm%)		1	1	1	1	1	
Wines			1	1	1	1		
X								
Xylene		C ₆ H ₄ (CH ₃) ₂	3					

1 – High Resistance

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□ (blank) – Insufficient Data

ETHYLENE PROPYLENE (EPDM) CHEMICAL RESISTANCE DATA

Name	Concentration %	Formula	Temperature					
			68°F (20°C)	104°F (40°C)	140°F (60°C)	176°F (80°C)	212°F (100°C)	248°F (120°C)
Z								
Zinc Acetate		Zn(CH ₃ COO) ₂	1	1	1	1		
Zinc Chloride	Sol.Aq (Dil%)	ZnCl ₂	1	1	1	1	3	
Zinc Chloride	Sol.Aq (Sat%)	ZnCl ₂	1	1	1	1	2	
Zinc Chromate	Sol.Aq (Nd%)	ZnCrO ₄	1					
Zinc Cyanide	Sol.Aq (All%)	Zn(CN) ₂	1					
Zinc Nitrate	Sol.Aq (Nd%)	Zn(NO ₃) ₂	1	1	1	1		
Zinc Sulfate	Sol.Aq (Dil%)	ZnSO ₄	1	1	1	1		
Zinc Sulfate	Sol.Aq (Sat%)	ZnSO ₄	1	1	1	1		
Zinc Acetate		Zn(CH ₃ COO) ₂	1	1	1	1		
Zinc Chloride	Sol.Aq (Dil%)	ZnCl ₂	1	1	1	1	3	
Zinc Chloride	Sol.Aq (Sat%)	ZnCl ₂	1	1	1	1	2	
Zinc Chromate	Sol.Aq (Nd%)	ZnCrO ₄	1					
Zinc Cyanide	Sol.Aq (All%)	Zn(CN) ₂	1					
Zinc Nitrate	Sol.Aq (Nd%)	Zn(NO ₃) ₂	1	1	1	1		
Zinc Sulfate	Sol.Aq (Dil%)	ZnSO ₄	1	1	1	1		
Zinc Sulfate	Sol.Aq (Sat%)	ZnSO ₄	1	1	1	1		

1 – High Resistance

2 – Limited Resistance

3 – No Resistance

□ (blank) – Insufficient Data

FLUOROCARBON (FKM) CHEMICAL RESISTANCE DATA

Name	Concentration %	Formula	Temperature					
			68°F (20°C)	104°F (40°C)	140°F (60°C)	176°F (80°C)	212°F (100°C)	248°F (120°C)
A								
Acetaldehyde	Sol.Aq (40%)	CH3CHO	2	2	2	3		
Acetaldehyde	Tech.P (100%)	CH3CHO	2	3	3			
Acetic Acid	Glacial (100%)	CH3COOH	3					
Acetic Acid	Sol.Aq (10%)	CH3COOH	2	2	2	3		
Acetic Acid	Sol.Aq (30%)	CH3COOH	2	2	2	3	3	
Acetic Acid	Sol.Aq (60%)	CH3COOH	3					
Acetic Acid	Sol.Aq (80%)	CH3COOH	3					
Acetic Acid Anhydride	Tech.P (100%)	(CH3CO)2O	3					
Acetone	Sol.Aq (10%)	CH3COCH3	3	3	3			
Acetone	Tech.P (100%)	CH3COCH3	3	3	3			
Acetonitrile		CH3CN	3					
Acetophenone	Tech.P (Nd%)	CH3COC6H5	3	3	3	3		
Acetyl Acetone		CH3COCH2COCH3	3					
Acetylene		C2H2	1	1	1	1	2	
Acrylonitrile	Tech.P (100%)	CH2=CH-CN	2	2	3			
Adipic Acid	Sol.Aq (Sat%)	HOOC(CH2)4COOH	1	1	1	1	2	2
Alcoholic Spirit			1					
Allyl Alcohol	Sol.Aq (96%)	CH2=CH-CH2OH	2	2	2	2		
Allyl Chloride		CH2=CHCH2Cl	1	1	3			
Alum	Sol.Aq (Dil%)	Al2(SO4)3K2SO4 4H2O	1	1	1	1	2	
Alum	Sol.Aq (Sat%)	Al2(SO4)3K2SO4 4H2O	1	1	1	1	2	
Aluminium Acetate	Sol.Aq (Sat%)	(CH3COO)3Al	2	1	1	1	1	
Aluminium Bromide	Sol.Aq (Sat%)	AlBr3	1	1	1	1		
Aluminium Chloride	Sol.Aq (All%)	AlCl3	1	1	1	1	1	3
Aluminium Fluoride	Sol.Aq (Sat%)	AlF3	1	1	1	2	2	3
Aluminium Hydroxide	Sol.Aq (All%)	Al(OH)3	1	1	1	1	2	
Aluminium Nitrate	Sol.Aq (Sat%)	Al(NO3)3	1	1	1	1	1	3
Aluminium Sulfate	Sol.Aq (10%)	Al2(SO4)3	1	1	1	1	1	
Aluminium Sulfate	Sol.Aq (Sat%)	Al2(SO4)3	1	1	1	1	2	3
Ammonia	Sol.Aq (Dil%)	NH3	2	2	3			
Ammonia	Sol.Aq (Sat%)	NH3	2	2	3			
Ammonia Gas	Tech.P (100%)	NH3	3					
Ammonium Acetate	Sol.Aq (Sat%)	CH3COONH4	1	1	1	2	2	
Ammonium Bifluoride	Sol.Aq (Sat%)	NH4FHF	1	1	1	2	2	
Ammonium Carbonate	Sol.Aq (100%)	(NH4)2CO3	1	1	1	1	3	
Ammonium Chloride	Sol.Aq (Sat%)	NH4Cl	1	1	1	1	1	
Ammonium Fluoride	Sol.Aq (25%)	NH4F	1	1	1		3	

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□ (blank) – Insufficient Data

FLUOROCARBON (FKM) CHEMICAL RESISTANCE DATA

Name	Concentration %	Formula	Temperature °C					
			20	40	60	80	100	120
Ammonium Hydroxide	Sol.Aq (Dil%)	NH ₄ OH	2	3				
Ammonium Hydroxide	Sol.Aq (Sat%)	NH ₄ OH	2	2	3			
Ammonium Metaphosphate	Sol.Aq (All%)	(NH ₄) ₄ P ₄ O ₁₂	1	1	1	1		
Ammonium Nitrate	Sol.Aq (Sat%)	NH ₄ NO ₃	1	1	2	2	3	
Ammonium Persulfate	Sol.Aq (All%)	(NH ₄) ₂ S ₂ O ₈	1	1	1			
Ammonium Phosphate			1	1	1	1	3	
Ammonium Sulfate	Sol.Aq (All%)	(NH ₄) ₂ SO ₄	1	1	1	1	3	
Ammonium Sulfhydrate	Sol.Aq (Dil%)	NH ₄ OH(NH ₄) ₂ SO ₄	1	2	2	2	3	
Ammonium Sulfhydrate	Sol.Aq (Sat%)	NH ₄ OH(NH ₄) ₂ SO ₄	1	2	2	2	3	
Ammonium Sulfide	Sol.Aq (10%)	(NH ₄) ₂ S	1	1	1	1		
Ammonium Sulfide	Sol.Aq (Sat%)	(NH ₄) ₂ S	1	1	1	1		
Amyl Acetate	Tech.P (100%)	CH ₃ COO(CH ₂) ₄ CH ₃	3					
Amyl Alcohol		CH ₃ (CH ₂) ₃ CH ₂ OH	1	1	1	2	3	
Amyl Borate	Tech.P (100%)	(C ₅ H ₁₁) ₃ BO ₃	3					
Amyl Chloride	Tech.P (100%)	CH ₃ (CH ₂) ₄ Cl	2					
Aniline	Tech.P (100%)	C ₆ H ₅ NH ₂	2	2	2			
Aniline Chlorhydrate	Sol.Aq (Sat%)	C ₆ H ₅ NH ₂ HCl	2	3				
Anthraquinone Sulfonic Acid			1					
Antimony Trichloride	Sol.Aq (90%)	SbCl ₃	1	1	1	2		
Aqua Regia		3HCl+1HNO ₃	2	2				
Arsenic Acid		H ₃ ASO ₄	1	1	1	2	2	2
Asphalt			1	1	1	1		
B								
Barium Carbonate	Sol.Aq (All%)	BaCO ₃	1	1	1	1	1	1
Barium Chloride	Sol.Aq (All%)	BaCl ₂	1	1	1	1	1	1
Barium Hydroxide	Sol.Aq (Sat%)	Ba(OH) ₂	1	1	1	1	1	1
Barium Nitrate	Sol.Aq (Sat%)	Ba(NO ₃) ₂	1	1	1	1	1	1
Barium Sulfate	Sol.Aq (Sat%)	BaSO ₄	1	1	1	1	1	1
Barium Sulfide	Sol.Aq (Sat%)	BaS	1	1	1	1	1	1
Beer			1	1	1	1	2	
Benzaldehyde	Sol.Aq (Sat%)	C ₆ H ₅ CHO	3					
Benzene	Tech.P (100%)	C ₆ H ₆	1	2	2	2	2	
Benzene Chloride	Tech.P (100%)	C ₆ H ₅ Cl	1	1	2	3		
Benzene Sulfonic Acid	Sol.Aq (10%)	C ₆ H ₅ SO ₃ H	1	1	1	2	3	

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FLUOROCARBON (FKM) CHEMICAL RESISTANCE DATA

Name	Concentration %	Formula	Temperature					
			68°F (20°C)	104°F (40°C)	140°F (60°C)	176°F (80°C)	212°F (100°C)	248°F (120°C)
Benzene+Benzine			1	2				
Benzine(Free Of Pb And Aromatic)	Tech.P (100%)	C5H12÷C12H26	1	1	2	2	3	
Benzoic Acid	Sol.Aq (Sat%)	C6H5COOH	1	1	1	1	2	3
Benzyl Alcohol	Tech.P (100%)	C6H5CH2OH	1	1	1	2	2	
Benzyl Chloride	Tech.P (100%)	C6H5CH2Cl	3					
Bleaching Lye		NaClO+NaCl	1					
Borax	Sol.Aq (All%)	Na2B4O7	1	1	1	1	2	
Boric Acid	Sol.Aq (Sat%)	H3BO3	1	1	1	1	2	3
Brine			1	1	1	1	1	
Bromic Acid		HBrO3						
Bromine Water		Br2+H2O	1	1	2	3		
Bromine,Liquid	Tech.P (100%)	Br2	1	1	1	1		
Bromine,Vapours		Br2	1					
Butadiene	Gas (100%)	CH2=CH-CH=CH2	1	1	1	2		
Butane Gas		CH3CH2CH2CH3	1	1	1	1	2	
Butanediol	Sol.Aq (10%)	CH3CH2CHOHCH2OH	1	1	1	2	3	
Butanediol	Sol.Aq (Conc%)	CH3CH2CHOHCH2OH	1					
Butyl Acetate	Tech.P (100%)	CH3COOCH2CH2CH2CH3	3					
Butyl Acrylate	Tech.P (100%)	CH2=CHCOOC4H9	3					
Butyl Alcohol	Tech.P (100%)	CH3(CH2)3OH	1	2	2			
Butyl Amine	Sol.Aq (Sat%)	CH3(CH2)3NH2	3					
Butyl Ether	Tech.P (100%)	[CH3(CH2)3]2O	3					
Butyl Phenol	Tech.P (100%)	C4H9C6H4OH	2	3				
Butyl Phthalate	Tech.P (100%)	HOCC6H4COOC4H9	2	2	3			
Butylene	Liquid (100%)	CH2=CH-CH2CH3	1					
Butylene	Tech.P (100%)	CH2=CH-CH2CH3	1	1	1	1		
Butylene Glycol	Tech.P (100%)	CH2OH-CH=CH-CH2OH	1	1	2			
Butyric Acid	Sol.Aq (20%)	CH3CH2CH2COOH	2	3				
Butyric Acid	Tech.P (100%)	CH3CH2CH2COOH	2	2	3			
C								
Calcium Acetate	Sol.Aq (Sat%)	Ca(CH3COO)2	1	1	2	2	3	
Calcium Bisulfite	Sol.Aq (Sat%)	Ca(HSO3)2	1	1	1	2	3	
Calcium Carbonate	Sol.Aq (All%)	CaCO3	1	1	1	1	1	1
Calcium Chlorate	Sol.Aq (Sat%)	Ca(ClO3)2	1	1	1	2	2	
Calcium Chloride	Sol.Aq (All%)	CaCl2	1	1	1	1	2	
Calcium Hydroxide	Sol.Aq (All%)	Ca(OH)2	1	1	1	1	1	

1 – High Resistance

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□ (blank) – Insufficient Data

FLUOROCARBON (FKM) CHEMICAL RESISTANCE DATA

Name	Concentration %	Formula	Temperature °C					
			20	40	60	80	100	120
Calcium Hypochlorite	Sol.Aq (Sat%)	Ca(ClO) ₂	1	1	1	1	2	
Calcium Nitrate	Sol.Aq (50%)	Ca(NO ₃) ₂	1	1	1	1	1	
Calcium Sulfate	Sol.Aq (Sat%)	CaSO ₄	1	1	1	1	2	
Calcium Sulfide	Sol.Aq (Sat%)	CaS	1	1	1	1	1	
Camphor Oil			1					
Caprylic Acid	Tech.P (100%)	CH ₃ (CH ₂) ₆ COOH						
Carbon Dioxide	Gas (100%)	CO ₂	1	1	1	1	2	3
Carbon Dioxide	Sol.Aq (Nd%)	CO ₂ +H ₂ O	1	1	1	1	1	1
Carbon Disulfide	Tech.P (100%)	CS ₂	1	2	2	3		
Carbon Monoxid	Gas (100%)	CO	1	1	1	1	1	
Carbon Tetrachloride	Tech.P (100%)	CCl ₄	1	1	1	2	3	
Carbonic Acid	Sol.Aq (Sat%)	H ₂ CO ₃	1	1	1	1	2	3
Castor Oil			1					
Chloramine	Sol.Aq (Dil%)	C ₆ H ₅ SO ₂ NNaCl	1					
Chloric Acid	Sol.Aq (10%)	HClO ₃	2	2	2	3		
Chloric Acid	Sol.Aq (20%)	HClO ₃	1	2	2	3		
Chlorine	Gas (10%)	Cl ₂	1	1				
Chlorine	Gas (100%)	Cl ₂	1	2	3			
Chlorine Dioxide	Tech.P (100%)	ClO ₂	3					
Chlorine Gas	Humid (All%)	Cl ₂	2	2	3			
Chlorine Liquid	Tech.P (100%)	Cl ₂	1	1	1			
Chlorine Water		Cl ₂ +H ₂ O	2					
Chloro Benzene	Tech.P (100%)	C ₆ H ₅ Cl	1	1	2	3		
Chloro Sulfonic Acid	Tech.P (100%)	HCISO ₃	3					
Chlorobiphenyl	Tech.P (100%)	C ₆ H ₅ C ₆ H ₄ Cl	1					
Chloroform	Tech.P (100%)	CHCl ₃	1	2				
Chrome Alum		KCr(SO ₄) ₂	1	1	1	1	1	
Chrome Alum	Sol.Aq (Sat%)	KCr(SO ₄) ₂	1	1	1	1	1	
Chromic Acid	Sol.Aq (10%)	CrO ₃ +H ₂ O	1	1	2	3		
Chromic Acid	Sol.Aq (30%)	CrO ₃ +H ₂ O	1	1				
Chromic Acid	Sol.Aq (50%)	CrO ₃ +H ₂ O	1	1	2	3		
Citric Acid	Sol.Aq (50%)	C ₃ H ₄ (OH)(COOH) ₃	1	1	1	1	2	3
Compressed Air W/Oil			1	2	2	2		
Copper Acetate		Cu(COOCH ₃) ₂	2	1				
Copper Borofluoride	Sol.Aq (Nd%)	CuBF ₄	1					
Copper Carbonate	Sol.Aq (Sat%)	CuCO ₃	1	1	1	2		
Copper Chloride	Sol.Aq (Sat%)	CuCl ₂	1	1	1	1	1	
Copper Cyanide	Sol.Aq (All%)	Cu(CN) ₂	1	1	1	2		

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FLUOROCARBON (FKM) CHEMICAL RESISTANCE DATA

Name	Concentration %	Formula	Temperature					
			68°F (20°C)	104°F (40°C)	140°F (60°C)	176°F (80°C)	212°F (100°C)	248°F (120°C)
Copper Fluoride	Sol.Aq (All%)	CuF ₂	1	1				
Copper Nitrate	Sol.Aq (Nd%)	Cu(NO ₃) ₂	1	1	1	1	1	
Copper Sulfate	Sol.Aq (Dil%)	CuSO ₄	1	1	1	2		
Copper Sulfate	Sol.Aq (Sat%)	CuSO ₄	1	1	1	1	1	
Cottonseed Oil			1	1	1	1	1	
Cresol	Sol.Aq (>=90%)	CH ₃ C ₆ H ₄ OH	1	1	2			
Cresol	Sol.Aq (Dil%)	CH ₃ C ₆ H ₄ OH	1					
Croton Aldehyde	Tech.P (100%)	CH ₃ -CH=CH-CHO	2	3				
Cryolite	Sol.Aq (Sat%)	Na ₃ AlF ₆	1	1	1			
Cyclohexane	Tech.P (100%)	C ₆ H ₁₂	1	1	1	2	3	
Cyclohexanol	Tech.P (100%)	C ₆ H ₁₁ OH	1	1	1	2	3	
Cyclohexanone	Tech.P (100%)	C ₆ H ₁₀ O	3					
D								
Decalin (Decahydronaftalene)	Tech.P (100%)	C ₁₀ H ₁₈	1					
Detergents	Sol.Aq (Comm%)		1	1	1	1		
Dextrine			1	1	1	1	1	
Dextrose	Sol.Aq (All%)	C ₆ H ₁₂ O ₆	1	1	1	1	1	
Di-Isobutyl Ketone	Tech.P (100%)	(CH ₃) ₂ CHCH ₂ COCH ₂ CH(CH ₃)	3					
Di-Isopropyl Ketone	Tech.P (100%)	[(CH ₃) ₂ CH] ₂ CO	3					
Diacetone Alcohol	Tech.P (100%)	(CH ₃) ₂ COHCH ₂ COCH ₃	3					
Dibutyl Amine	Tech.P (100%)	(C ₄ H ₉) ₂ NH	3					
Dibutyl Ether	Tech.P (100%)	[CH ₃ (CH ₂) ₃] ₂ O	2	2	2			
Dibutyl Phthalate	Tech.P (100%)	C ₆ H ₄ (COOC ₄ H ₉) ₂	2	2	3			
Dibutyl Sebacate	Tech.P (100%)	C ₈ H ₁₆ (COOC ₄ H ₉) ₂	1					
Dichloro Benzene	Tech.P (100%)	C ₆ H ₄ Cl ₂	1	1	1	2	3	
Dichloroacetic Acid	Sol.Aq (50%)	Cl ₂ CHCOOH	2	2	3			
Dichloroacetic Acid	Tech.P (100%)	Cl ₂ CHCOOH	2	3				
Dichloroacetic Acid Methyl Ester	Tech.P (100%)	Cl ₂ CHCOOCH ₃	3					
Dichloroethylene	Tech.P (100%)	CHCl=CHCl	1	1	2	3		
Diesel Oil			1	1				
Diethylamine	Tech.P (100%)	(C ₂ H ₅) ₂ NH	3					
Diethylether	Tech.P (100%)	C ₂ H ₅ OC ₂ H ₅	3					
Diglycolic Acid	Sol.Aq (Sat%)	HOOC-CH ₂ -OCH ₂ -COOH	1					
Diisobutylene	Tech.P (100%)	C ₈ H ₁₆	1	1	1			

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FLUOROCARBON (FKM) CHEMICAL RESISTANCE DATA

Name	Concentration %	Formula	Temperature °C					
			20	40	60	80	100	120
Dimethyl Amine	Tech.P (100%)	(CH ₃) ₂ NH	3					
Dimethyl Formamide	Tech.P (100%)	HCON(CH ₃) ₂	3					
Dimethyl Phthalate	Tech.P (100%)	C ₆ H ₄ (COOCH ₃) ₂	1					
Dinonyl Phthalate	Tech.P (100%)	C ₆ H ₄ (COOC ₉ H ₁₉) ₂	1					
Diocetyl Phthalate	Tech.P (100%)	C ₆ H ₄ (COOC ₈ H ₁₇) ₂	1					
Dioxane	Tech.P (100%)	(CH ₂) ₄ O ₂	3					
E								
Epichlorohydrin	Tech.P (100%)	C ₃ H ₅ ClO	3					
Ethyl Acetate	Tech.P (100%)	CH ₃ COOCH ₂ CH ₃	3	3	3			
Ethyl Acetoacetate	Tech.P (100%)	CH ₃ COCH ₂ COOCH ₂ CH ₃	3					
Ethyl Acrylate	Tech.P (100%)	CH ₂ =CHCOOCH ₂ CH ₃	3					
Ethyl Alcohol	Sol.Aq (96%)	CH ₃ CH ₂ OH	1	1	1	1		
Ethyl Benzene	Tech.P (100%)	C ₆ H ₅ C ₂ H ₅	1	2	3			
Ethyl Chloride	Tech.P (100%)	CH ₃ CH ₂ Cl	1	2	2	3		
Ethyl Ether	Tech.P (100%)	CH ₃ CH ₂ OCH ₂ CH ₃	3					
Ethylene Chlorohydrin	Tech.P (100%)	ClCH ₂ CH ₂ OH	1	2	3			
Ethylene Diamina	Tech.P (100%)	NH ₂ CH ₂ CH ₂ NH ₂	2	3	3			
Ethylene Dichloride	Tech.P (100%)	CH ₂ ClCH ₂ Cl	1	1	1	1		
Ethylene Glycol	Tech.P (100%)	HOCH ₂ -CH ₂ OH	1	1	1	2	2	
Ethylene Oxide	Tech.P (100%)	C ₂ H ₄ O	3					
F								
Fatty Acids	Tech.P (100%)	R>C ₆	1					
Ferric Chloride	Sol.Aq (10%)	FeCl ₃	1	1	1	1	2	
Ferric Chloride	Sol.Aq (Sat%)	FeCl ₃	1	1	1	1	2	
Ferric Nitrate		Fe(NO ₃) ₃	1	1	1	1	2	
Ferric Sulfate	Sol.Aq (Sat%)	Fe ₂ (SO ₄) ₃	1	1	1	1	2	
Ferrous Chloride	Tech.P (Sat%)	FeCl ₂	1	1	1	1	2	
Ferrous Hydroxide	Tech.P (Sat%)	Fe(OH) ₂	1	1	1	1	2	
Ferrous Nitrate	Sol.Aq (Sat%)	Fe(NO ₂) ₂	1	1	1	1	1	
Ferrous Sulfate	Sol.Aq (Sat%)	FeSO ₄	1	1	1	1	2	
Fertilizer Salts	Sol.Aq (10%)		1	1	1	1	2	
Fertilizer Salts	Sol.Aq (Sat%)		1	1	1	1	2	
Fluoboric Acid		HBF ₄	1	1	1	1		
Fluoboric Acid	Tech.P (100%)	HBF ₄	1	1	1	1	1	

1 – High Resistance

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□ (blank) – Insufficient Data

FLUOROCARBON (FKM) CHEMICAL RESISTANCE DATA

Name	Concentration %	Formula	Temperature					
			68°F (20°C)	104°F (40°C)	140°F (60°C)	176°F (80°C)	212°F (100°C)	248°F (120°C)
Fluorine Gas Dry		F2	2					
Fluosilicic Acid	Sol.Aq (32%)	H2SiF6	1	1	1	2	2	
Formaldehyde	Sol.Aq (37%)	CH2O	1	1	1	1	3	
Formamide	Tech.P (100%)	HCONH2	2	3				
Formic Acid	Sol.Aq (50%)	HCOOH	1	2	2	3		
Formic Acid	Tech.P (100%)	HCOOH	3	3				
Freon F-11	Tech.P (100%)	CCl3F	1	1	1			
Freon F-113	Tech.P (100%)	CClF2-CCl2F	1	1	1			
Freon F-114	Tech.P (100%)	CClF2-CClF2	1	1				
Freon F-12	Tech.P (100%)	CCl2F2	2	2				
Freon F-21	Tech.P (100%)	CHCl2F	3					
Freon F-22	Tech.P (100%)	CHClF2	3					
Fructose	Sol.Aq (Sat%)	C6H12O6	1	1	1	1	2	2
Fruit Pulp And Juice			1	1	1			
Fuel Oil			1	1	2	2		
Furfural	Tech.P (100%)	C5H4O2	2	3	3			
Furfural Alcool		C5H3OCH2OH	3	3				
Furfuryl Alcohol	Tech.P (100%)	C5H6O2	2	3				
G								
Gallic Acid	Sol.Aq (Sat%)	(OH)3C6H2COOH	1					
Gas Exhaust Acid								
Gas Exhaust With Nitrous Vapours			2					
Gas Illuminating	Tech.P (100%)		1					
Gas Natural			1	1	2	2		
Gelatine			1	1	1	1	1	
Gin			1	1	1	1	1	
Glucose	Sol.Aq (All%)	C6H12O6	1	1	1	1	1	2
Glycerine	Sol.Aq (All%)	C3H5(OH)3	1	1	1	1	2	
Glycocol	Sol.Aq (10%)	NH2CH2COOH	1	1	2	2		
Glycolic Acid	Sol.Aq (37%)	HOCH2COOH	1	2	2	3		
H								
Heptane	Tech.P (100%)	C7H16	1	1	1	2	3	
Hexane	Tech.P (100%)	C6H14	1	1	2	2	3	
Hydrazine	Tech.P (100%)	NH2-NH2	3					

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FLUOROCARBON (FKM) CHEMICAL RESISTANCE DATA

Name	Concentration %	Formula	Temperature °C					
			20	40	60	80	100	120
Hydrazine Hydrate	Sol.Aq (Dil%)	NH ₂ -NH ₂ -H ₂ O	2					
Hydriodic Acid	Sol.Aq (Sat%)	HI	1	1				
Hydrobromic Acid		HBr	1	1	1			
Hydrochloric Acid	Gas (100%)	HCl	1	1	1			
Hydrochloric Acid	Sol.Aq (10%)	HCl	1	1	1	1	2	2
Hydrochloric Acid	Sol.Aq (30%)	HCl	1	1	1	2	2	3
Hydrochloric Acid	Sol.Aq (5%)	HCl	1	1	1	1	2	2
Hydrochloric Acid	Sol.Aq (Sat%)	HCl	1	1	2	3		
Hydrocyanic Acid	Sol.Aq (Dil%)	HCN	1	1	2	2	3	
Hydrocyanic Acid		HCN	1	1	2	2	3	
Hydrofluoric Acid	Sol.Aq (10%)	HF	1	1	1	1	1	
Hydrofluoric Acid	Sol.Aq (40%)	HF	1	1	1	2		
Hydrofluoric Acid	Sol.Aq (70%)	HF	1	1	2	3		
Hydrogen Gas		H ₂	1	1	1	1	1	
Hydrogen Peroxide	Sol.Aq (10%)	H ₂ O ₂	1	2	2	2		
Hydrogen Peroxide	Sol.Aq (50%)	H ₂ O ₂	1	2	2	3		
Hydrogen Peroxide	Sol.Aq (90%)	H ₂ O ₂	1					
Hydrogen Sulfide	Sol.Aq (Sat%)	H ₂ S	1	1	1	2	3	
Hydrogen Sulfide Dry		H ₂ S	1	1	2	2	2	
Hydrogen Sulfide Water	Sol.Aq (Sat%)	H ₂ S	1	1	1	2	3	
Hydroquinone	Sol.Aq (Sat%)	C ₆ H ₄ O ₂	1	1	3			
Hydrosulphite	Sol.Aq (<=10%)		1					
Hydroxylamine Sulphate	Sol.Aq (All%)	(NH ₂ OH) ₂ -H ₂ SO ₄	1	1				
Hypochlorous Acid	Sol.Aq (10%)	HCIO	1	1	1			
I								
Iodine Dry And Wet		I ₂	2					
Iodine Tincture		I ₂	1	1	1			
Iso-Octane		C ₈ H ₁₈	1	1	1	2	2	3
Isobutyl Alcohol	Tech.P (100%)	(CH ₃) ₂ CHCH ₂ OH	1					
Isopropyl Acetate	Tech.P (100%)	CH ₃ COOCH(CH ₃) ₂	3					
Isopropyl Alcohol	Tech.P (100%)	(CH ₃) ₂ CHOH	1	1	1	2	2	
Isopropyl Chloride		(CH ₃) ₂ CHCl	1					
Isopropyl Ether	Tech.P (100%)	(CH ₃) ₂ CHOCH(CH ₃) ₂	3					
Kerosene			1	1	2	3		
Lactic Acid	Sol.Aq (<=28%)	CH ₃ CHOHCOOH	1	1	1	2	2	
Lanoline			1	1	1			

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□ (blank) – Insufficient Data

FLUOROCARBON (FKM) CHEMICAL RESISTANCE DATA

Name	Concentration %	Formula	Temperature					
			68°F (20°C)	104°F (40°C)	140°F (60°C)	176°F (80°C)	212°F (100°C)	248°F (120°C)
Lard Oil			1	1	1			
Lead Acetate	Sol.Aq (Sat%)	Pb(CH3COO)2	1	1	1	2		
Lead Chloride	Sol.Aq (Sat%)	PbCl2	1	1	1	1	1	
Lead Nitrate	Sol.Aq (Sat%)	Pb(NO3)2	1	1	1	1	1	
Lead Sulfate	Sol.Aq (Sat%)	PbSO4	1	1	1	1	1	
Linseed Oil			1	1	1	1	2	2
Liqueurs			1					
Lithium Bromide	Sol.Aq (60%)	LiBr	1	1	1	1	1	
Lubricating Oils			1	1	1	1		
Lubricating Oils,Free Of Aromatic			1	1	1			
M								
Magnesium Carbonate	Sol.Aq (All%)	MgCO3	1	1	1	1	1	
Magnesium Chloride	Sol.Aq (Sat%)	MgCl2	1	1	1	1	2	
Magnesium Hydroxide	Sol.Aq (All%)	Mg(OH)2	1	1	1	1	1	
Magnesium Nitrate	Sol.Aq (Nd%)	Mg(NO3)2	1	1	1	1	1	
Magnesium Sulfate		MgSO4	1	1	1	1	1	
Maize Oil			1	1	1	1		
Maleic Acid	Sol.Aq (Sat%)	HOOC-CH=CH-COOH	1	1	1	2		
Malic Acid	Sol.Aq (Sat%)	HOOCCH2CHOHCOOH	1	1	2			
Manganese Sulfate		MnSO4	1	1	1	1	1	
Mercuric Chloride	Sol.Aq (Sat%)	HgCl2	1	1	1			
Mercuric Cyanide	Sol.Aq (All%)	Hg(CN)2	1	1	1			
Mercuric Sulfate	Sol.Aq (Sat%)	HgSO4	1	1	1	1	1	
Mercurous Nitrate	Sol.Aq (Sat%)	HgNO3	1	1	1	1		
Mercury	Tech.P (100%)	Hg	1	1	1			
Methane		CH4	1	1	1	1	2	
Methanesulfonic Acid	Sol.Aq (50%)	CH3SO3H	1				3	
Methanesulfonic Acid	Tech.P (100%)	CH3SO3H	2				3	
Methyl Acetate	Tech.P (100%)	CH3COOCH3	3					
Methyl Acrylate	Tech.P (100%)	CH2=CHCOOCH3	3					
Methyl Alcohol	Tech.P (100%)	CH3OH	2	2	3	3	3	
Methyl Amine	Sol.Aq (32%)	CH3NH2	2					
Methyl Bromide	Tech.P (100%)	CH3Br	1	1	1	1	2	
Methyl Chloride	Tech.P (100%)	CH3Cl	3					

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□ (blank) – Insufficient Data

FLUOROCARBON (FKM) CHEMICAL RESISTANCE DATA

Name	Concentration %	Formula	Temperature °C					
			20	40	60	80	100	120
Methyl Ether		CH ₃ OCH ₃	3					
Methyl Ethyl Ketone		CH ₃ COCH ₂ CH ₃	3					
Methyl Isobutyl Ketone		CH ₃ COCH ₂ CH ₃ (CH ₃) ₂	3					
Methyl Isopropyl Ketone		CH ₃ COCH(CH ₃) ₂	3					
Methylene Bromide		CH ₂ Br ₂	1					
Methylene Chloride		CH ₂ Cl ₂	1	1				
Methylene Iodine		CH ₂ I ₂	1	1	1	1	1	
Milk			1	1	1	1	1	
Mineral Oil			1	1	1	1	1	1
Mixed Acids(Chromic,Sulphuric)		H ₂ CrO ₄ /H ₂ SO ₄ /H ₂ O	1	1	1			
Mixed Acids(Sulphuric,Nitric)		H ₂ SO ₄ /HNO ₃ /H ₂ O	1	1	2			
Mixed Acids(Sulphuric,Phosphoric)		H ₂ SO ₄ /H ₃ PO ₄ /H ₂ O	1	1	1	2		
Molasses			1	1	1			
Monochloroacetic Acid	Sol.Aq (50%)	ClCH ₂ COOH	2	3				
Monochloroacetic Acid Ethyl Ester	Tech.P (100%)	ClCH ₂ COOCH ₂ CH ₃	3					
Motor Oil			1					
N								
Naphtha			1	1	1			
Naphthalene	Tech.P (100%)	C ₁₀ H ₈	1	1	1	1		
Nickel Acetate		(CH ₃ COO) ₂ Ni	3					
Nickel Chloride	Sol.Aq (All%)	NiCl ₂	1	1	1	1	1	
Nickel Nitrate	Sol.Aq (Sat%)	Ni(NO ₃) ₂	1	1	1	1	1	1
Nickel Sulfate	Sol.Aq (Dil%)	NiSO ₄	1	1	1	1	2	
Nickel Sulfate	Sol.Aq (Sat%)	NiSO ₄	1	1	1	1	2	
Nicotine		C ₁₀ H ₁₄ N ₂						
Nicotinic Acid		C ₅ H ₄ NCOOH						
Nitric Acid	Sol.Aq (20%)	HNO ₃	1	1	2			
Nitric Acid	Sol.Aq (40%)	HNO ₃	1	1	2	2	3	
Nitric Acid	Sol.Aq (70%)	HNO ₃	2	2	3			
Nitric Acid	Tech.P (100%)	HNO ₃	2					
Nitrobenzene		C ₆ H ₅ NO ₂	1	1	1	2		
Nitroethane	Tech.P (100%)	CH ₃ CH ₂ NO ₂	3					

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□ (blank) – Insufficient Data

FLUOROCARBON (FKM) CHEMICAL RESISTANCE DATA

Name	Concentration %	Formula	Temperature						
			68°F (20°C)	104°F (40°C)	140°F (60°C)	176°F (80°C)	212°F (100°C)	248°F (120°C)	
Nitromethane	Tech.P (100%)	CH3NO2	3						
Nitrotoluene	Tech.P (100%)	CH3C6H4NO2	2	3					
Nitrous Acid	Sol.Aq (10%)	HNO2	1	1	1				
Nitrous Gases		NOx	1	1	1				
O									
Oleic Acid	Tech.P (100%)	C17H33COOH	1	1	2				
Oleum		H2SO4+SO3	3						
Oleum Vapours		H2SO4+SO3	3						
Olive Oil			1	1	1	1			
Oxalic Acid	Sol.Aq (10%)	HOCCOOH	1						
Oxalic Acid	Sol.Aq (Sat%)	HOCCOOH	1	1	2	3			
Oxygen		O2	1	1	1	1	1	1	
Ozone	Sol.Aq (Sat%)	O3	1	2	2				
Ozone Gas		O3	1	2					
P									
Palmitic Acid		CH3(CH2)14COOH	1	1	1				
Paraffin			1	1	1				
Paraffin Emulsions	Emu.Aq (Comm%)		1	1	1	1	2		
Paraffin Oil			1	1	1	1	1		
Peanut Oil			1	1	1				
Perchloric Acid	Sol.Aq (10%)	HClO4	1	1	1	1	2		
Perchloric Acid	Sol.Aq (70%)	HClO4	1	1	1	1	2		
Petroleum	Tech.P (100%)		1	1	1				
Petroleum Ether	Tech.P (100%)		1	1	2				
Phenol	Sol.Aq (1%)	C6H5OH	1	1	1	2			
Phenol	Sol.Aq (90%)	C6H5OH	1	1	1	2			
Phenylhydrazine	Tech.P (100%)	C6H5NHNH2	2	2	2				
Phenylhydrazine Hydrochloride	Sol.Aq (Sat%)	C6H5NHNH2HCl	1	2	2				
Phosgene Gas	Tech.P (100%)	COCl2		1	1	2			
Phosphoric Acid	Sol.Aq (25%)	H3PO4	1	1	1	1	1		
Phosphoric Acid	Sol.Aq (50%)	H3PO4	1	1	1	1	1		
Phosphoric Acid	Sol.Aq (85%)	H3PO4	1	1	1	1	2		

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FLUOROCARBON (FKM) CHEMICAL RESISTANCE DATA

Name	Concentration %	Formula	Temperature °C					
			20	40	60	80	100	120
Phosphorous Penta-Trichloride	Tech.P (100%)	PCl5-PCl3	1	2				
Phosphorous Pentoxide	Tech.P (100%)	P2O5	1	1	1			
Photographic Developer			1	1	1			
Photographic Emulsion			1	1	2			
Phthalic Acid	Sol.Aq (50%)	C6H4(COOH)2	1					
Phthalic Acid	Tech.P (100%)	C6H4(COOH)2	1					
Picric Acid	Sol.Aq (1%)	C6H2(OH)(NO2)3	1	1	1	2	2	
Plating Solutions,Cadmium			1	1	1			
Plating Solutions,Chrome			1	1	1			
Plating Solutions,Copper			1	1	1			
Plating Solutions,Gold			1	1	1			
Plating Solutions,Lead			1	1	1			
Plating Solutions,Nickel			1					
Plating Solutions,Rhodium			1					
Plating Solutions,Silver			1	1	1			
Plating Solutions,Tin			1	1	1	2		
Plating Solutions,Zinc			1	1	1			
Polyvinyl Acetate		[CH3COOCHCH2-]n	1					
Polyvinyl Alcohol	Tech.P (Nd%)	[-CH2CHOH-]n	1	1	1			
Potassium Acetate	Sol.Aq (Sat%)	CH3COOK	2					
Potassium Bicarbonate	Sol.Aq (Sat%)	KHCO3	1	1	1	1	1	
Potassium Bichromate	Sol.Aq (Sat%)	K2Cr2O7	1	1	1	1	1	
Potassium Bisulfate	Sol.Aq (Nd%)	KHSO4	1	1	1	1	1	
Potassium Borate	Sol.Aq (Sat%)	K3BO3	1	1	1			
Potassium Bromate	Sol.Aq (Sat%)	KBrO3	1	1	1	1	1	
Potassium Bromide	Sol.Aq (Sat%)	KBr	1	1	1	1	1	
Potassium Carbonate	Sol.Aq (Sat%)	K2CO3	1	1	1	1	1	
Potassium Chlorate	Sol.Aq (Sat%)	KClO3	1	1	1	1		
Potassium Chloride	Sol.Aq (Sat%)	KCl	1	1	1	1	1	
Potassium Chromate	Sol.Aq (Sat%)	K2CrO4	1	1	1	1	1	
Potassium Cyanide	Sol.Aq (Sat%)	KCN	1	1	1	1	2	
Potassium Ferricyanide	Sol.Aq (Sat%)	K4Fe(CN)6·3H2O	1	1	1			
Potassium Fluoride	Sol.Aq (Sat%)	KF	1	1	1	1	1	
Potassium Hydroxide	Sol.Aq (<=60%)	KOH	3					
Potassium Hypochlorite	Sol.Aq (Nd%)	KClO	2					
Potassium Iodide	Sol.Aq (Sat%)	KI	1	1	1	1	1	
Potassium Nitrate	Sol.Aq (Sat%)	KNO3	1	1	1	1	1	
Potassium Perborate	Sol.Aq (Nd%)	KBO3	1					

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FLUOROCARBON (FKM) CHEMICAL RESISTANCE DATA

Name	Concentration %	Formula	Temperature					
			68°F (20°C)	104°F (40°C)	140°F (60°C)	176°F (80°C)	212°F (100°C)	248°F (120°C)
Potassium Perchlorate	Sol.Aq (Sat%)	KClO ₄	1	1	1	1		
Potassium Permanganate	Sol.Aq (10%)	KMnO ₄	1	1	1			
Potassium Permanganate	Sol.Aq (Sat%)	KMnO ₄	1	1	1	1	1	1
Potassium Persulfate	Sol.Aq (Sat%)	K ₂ S ₂ O ₈	1	1	1	1	2	
Potassium Phosphates Acids	Sol.Aq (All%)	K ₂ HPO ₄ KH ₂ PO ₄	1	1	1	1	1	
Potassium Sulfate	Sol.Aq (Sat%)	K ₂ SO ₄	1	1	1	1	1	2
Propane Gas		CH ₃ CH ₂ CH ₃	1	1	1	1	2	
Propane Liquid		CH ₃ CH ₂ CH ₃	1	1	1	1		
Propionic Acid	Sol.Aq (50%)	CH ₃ CH ₂ COOH	2	1	2			
Propyl Acetate	Tech.P (100%)	CH ₃ COOCH ₂ CH ₂ CH ₃	3					
Propyl Alcohol	Sol.Aq (97%)	C ₃ H ₇ OH	1	1	1	1	1	
Propylene Glycol	Tech.P (100%)	CH ₃ CHOHCH ₂ OH	1	1	1	1	2	
Propylene Oxide	Tech.P (100%)		3					
Pyridine	Tech.P (100%)	C ₅ H ₅ N	3					
S								
Silicic Acid	Sol.Aq (All%)	H ₂ SiO ₃	1	1	1	1	2	
Silicone Oil			1	1	1	2		
Silver Cyanide	Sol.Aq (All%)	AgCN	1	1	1	1	2	
Silver Nitrate	Sol.Aq (Sat%)	AgNO ₃	1	1	1	1	2	
Silver Sulfate	Sol.Aq (Sat%)	Ag ₂ SO ₄	1	1	1	1	1	
Soap,Aqueous Solution	Sol.Aq (All%)		1	1	1	1		
Sodium Acetate	Sol.Aq (Sat%)	CH ₃ COONa	2					
Sodium Alum	Sol.Aq (Sat%)	NaAl(SO ₄) ₂	1	1	1	1		
Sodium Benzoate		C ₆ H ₅ COONa	1	1	1	2		
Sodium Bicarbonate	Sol.Aq (Sat%)	NaHCO ₃	1	1	1	1		
Sodium Bichromate	Sol.Aq (Sat%)	Na ₂ Cr ₂ O ₇	1	1	1	1	1	
Sodium Bisulfate	Sol.Aq (10%)	NaHSO ₄	1	1	1	1	1	
Sodium Bisulfite	Sol.Aq (100%)	NaHSO ₃	1	1	1	1	1	
Sodium Borate	Sol.Aq (Sat%)	Na ₂ B ₄ O ₇	1	1	1	1	2	
Sodium Bromate	Sol.Aq (All%)	NaBrO ₃	1	1	1	1		
Sodium Bromide	Sol.Aq (Sat%)	NaBr	1	1	1	1		
Sodium Carbonate (Soda)	Sol.Aq (Sat%)	Na ₂ CO ₃	1	1	1	1		
Sodium Chlorate	Sol.Aq (All%)	NaClO ₃	1	1	1	1		
Sodium Chloride	Sol.Aq (Dil%)	NaCl	1	1	1	1	1	2

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FLUOROCARBON (FKM) CHEMICAL RESISTANCE DATA

Name	Concentration %	Formula	Temperature °C					
			20	40	60	80	100	120
Sodium Chloride	Sol.Aq (Sat%)	NaCl	1	1	1	1	1	2
Sodium Chlorite	Sol.Aq (25%)	NaClO ₂	3					
Sodium Chromate	Sol.Aq (Dil%)	Na ₂ CrO ₄	1	1	1			
Sodium Cyanide	Sol.Aq (All%)	NaCN	1	1	1	1	2	
Sodium Disulphite	Sol.Aq (All%)	Na ₂ S ₂ O ₅	1	1	1			
Sodium Ferrocyanide	Sol.Aq (Sat%)	Na ₄ FeCN ₆	2	1	1			
Sodium Fluoride	Sol.Aq (Sat%)	NaF	1	1	1			
Sodium Hydroxide	Sol.Aq (10%)	NaOH	2	3	3			
Sodium Hydroxide	Sol.Aq (30%)	NaOH	3	3				
Sodium Hydroxide	Sol.Aq (50%)	NaOH	3					
Sodium Hypochlorite	Sol.Aq (12.5%)	NaClO	1	1	2			
Sodium Hypochlorite	Sol.Aq (3%)	NaClO	1	1	2			
Sodium Hyposulphite	Sol.Aq (Nd%)	Na ₂ S ₂ O ₃						
Sodium Iodide	Sol.Aq (All%)	NaI	1	1	1			
Sodium Metasilicate	Sol.Aq (<5%)	Na ₂ SiO ₃	1	1	1	1	1	
Sodium Nitrate	Sol.Aq (Sat%)	NaNO ₃	1	1	1	1	1	
Sodium Nitrite	Sol.Aq (Sat%)	NaNO ₂	1	1	1	1	1	
Sodium Oxalate	Sol.Aq (Sat%)	Na ₂ C ₂ O ₄	1					
Sodium Perborate	Sol.Aq (All%)	NaBO ₃	1	1	1	1		
Sodium Perchlorate	Sol.Aq (Nd%)	NaClO ₄	1	1	1	1		
Sodium Peroxide		Na ₂ O ₂	1	1	1	1		
Sodium Persulphate	Sol.Aq (Sat%)	Na ₂ S ₂ O ₈	1	1	1	1	2	
Sodium Phosphate	Sol.Aq (Sat%)	Na ₃ PO ₄	1	1	1	1	1	
Sodium Phosphate Biacid	Sol.Aq (Sat%)	NaH ₂ PO ₄	1	1	1	1	1	
Sodium Phosphate Monoacid	Sol.Aq (Sat%)	Na ₂ HPO ₄	1	1	1	1	1	
Sodium Silicate	Sol.Aq (Sat%)	Na ₂ SiO ₃	1	1	1	1	1	
Sodium Sulfate	Sol.Aq (Sat%)	Na ₂ SO ₄	1	1	1	1	1	
Sodium Sulfide	Sol.Aq (Dil%)	Na ₂ S	1					
Sodium Sulfide	Sol.Aq (Sat%)	Na ₂ S	1	1	1	1	2	
Sodium Sulfite	Sol.Aq (Sat%)	Na ₂ SO ₃	1	1	1	1	2	
Sodium Thiocyanate	Sol.Aq (Nd%)	NaSCN	1	1	1	1		
Sodium Thiosulphate	Sol.Aq (Sat%)	Na ₂ S ₂ O ₃	1	1	1			
Stannic Chloride	Sol.Aq (Sat%)	SnCl ₄	1	1	1			
Stannous Chloride	Sol.Aq (Sat%)	SnCl ₂	1	1	1	1	2	
Stearic Acid	Tech.P (100%)	C ₁₇ H ₃₅ COOH	1	1	2	2		
Styrene		C ₆ H ₅ CH=CH ₂	2					

1 – High Resistance

2 – Limited Resistance

3 – No Resistance

□ (blank) – Insufficient Data

FLUOROCARBON (FKM) CHEMICAL RESISTANCE DATA

Name	Concentration %	Formula	Temperature					
			68°F (20°C)	104°F (40°C)	140°F (60°C)	176°F (80°C)	212°F (100°C)	248°F (120°C)
Succinic Acid		COOH(CH ₂) ₂ COOH	1	1	1	1	2	
Sugar Syrup			1					
Sulfamic Acid	Sol.Aq (20%)	HSO ₃ NH ₂	1	1	1	1	1	
Sulphur		S	1	1	1	1		
Sulphur Chloride		S ₂ Cl ₂	1					
Sulphur Dichloride		SCl ₂	1					
Sulphur Dioxide	Sol.Aq (Sat%)	SO ₂	1					
Sulphur Dioxide Dry	Tech.P (100%)	SO ₂	1	1	1	2		
Sulphur Dioxide Liquid	Tech.P (100%)	SO ₂	1	1	1	2		
Sulphur Trioxide		SO ₃	3					
Sulphuric Acid	Sol.Aq (10%)	H ₂ SO ₄	1	1	1	1	1	2
Sulphuric Acid	Sol.Aq (50%)	H ₂ SO ₄	1	1	1	1	1	2
Sulphuric Acid	Sol.Aq (80%)	H ₂ SO ₄	1	1	1	1	2	
Sulphuric Acid	Sol.Aq (90%)	H ₂ SO ₄	1	1	1	2	2	3
Sulphuric Acid	Sol.Aq (96%)	H ₂ SO ₄	2	2	2			
Sulphuric Acid	Sol.Aq (98%)	H ₂ SO ₄	3					
Sulphuric Acid	Tech.P (100%)	H ₂ SO ₄	3	3	3	3	3	
Sulphurous Acid	Sol.Aq (Sat%)	H ₂ SO ₃	1	1	2	2	3	
T								
Tallow Emulsion			1					
Tannic Acid	Sol.Aq (All%)	C ₁₄ H ₁₀ O ₉	1	1	1	2		
Tartaric Acid	Sol.Aq (All%)	COOH(CHOH) ₂ COOH	1	1	1	1	2	
Tetrachloroethane		CHCl ₂ CHCl ₂	2					
Tetrachloroethylene		Cl ₂ C=CCl ₂	1	1	1	1	2	
Tetraethyl Lead	Tech.P (100%)	Pb(C ₂ H ₅) ₄	1	1	1	2		
Tetrahydrofurane		(CH ₂) ₄ O	3					
Tetrahydronaphthalene		C ₁₀ H ₁₂	1					
Thionyl Chloride	Tech.P (100%)	SOCl ₂	2					
Thiophene		C ₄ H ₈ O	3					
Titanic Sulfate	Sol.Aq (Dil%)	Ti(SO ₄) ₂						
Titanous Sulfate	Sol.Aq (Dil%)	Ti ₂ (SO ₄) ₃						
Toluene	Tech.P (100%)	C ₆ H ₅ CH ₃	1	2	2			
Toluic Acid		CH ₃ C ₆ H ₄ COOH	1	1	1			
Transformer Oil			1	1	1	1	1	
Tributylphosphate	Tech.P (100%)	(C ₄ H ₉) ₃ PO ₄	1					
Trichlorethylene	Tech.P (100%)	ClCH=CCl ₂	1	1	1	1		

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FLUOROCARBON (FKM) CHEMICAL RESISTANCE DATA

Name	Concentration %	Formula	Temperature °C					
			20	40	60	80	100	120
Trichloroacetic Acid	Sol.Aq (50%)	CCl ₃ COOH	3					
Trichloroacetic Acid	Tech.P (100%)	CCl ₃ COOH	3					
Trichloroethane	Tech.P (100%)	CH ₃ CCl ₃	1	2				
Tricresylphosphate	Tech.P (100%)	(CH ₃ C ₆ H ₄ O) ₃ PO ₄	1					
Triethanolamine	Tech.P (100%)	N(CH ₂ CH ₂ OH) ₃	2					
Triethylamine	Tech.P (100%)	N(CH ₂ CH ₃) ₃	2					
Trioctylphosphate	Tech.P (100%)	(C ₈ H ₁₇) ₃ PO ₄	2					
Turpentine Oil	Tech.P (100%)		1	1	1	2		
U								
Urea	Sol.Aq (33%)	NH ₂ CONH ₂	1	1	1			
Urea	Sol.Aq (<=10%)	NH ₂ CONH ₂	1	1	1			
Uric Acid	Sol.Aq (10%)	C ₅ H ₄ N ₄ O ₃						
Urine			1	1	1			
V								
Vaseline Oil			1	1	1	1	2	
Vegetable Oils And Fats			1	1	1	1	2	
Vinyl Acetate	Tech.P (100%)	CH ₂ =CHOOCCH ₃	3					
Vinyl Chloride	Tech.P (100%)	CH ₂ =CHCl	1		2	1		
W								
Water		H ₂ O	1	1	1	1		
Water, Demineralizate		H ₂ O	1	1	1	1	1	
Water, Potable		H ₂ O	1	1	1	1	1	
Water, Rain		H ₂ O	1	1	1	1	1	
Water, Salt		H ₂ O+NaCl	1	1	1	1		
Water, Sea			1	1	1	1	1	
Water, Condensed		H ₂ O	1	1	1	1	1	
Water, Distilled		H ₂ O	1	1	1	1	1	1
Whisky			1	1	1			
White Liquor			1					
Wine Vinegar	Tech.P (Comm%)		1	1	1			

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FLUOROCARBON (FKM) CHEMICAL RESISTANCE DATA

Name	Concentration %	Formula	Temperature					
			68°F (20°C)	104°F (40°C)	140°F (60°C)	176°F (80°C)	212°F (100°C)	248°F (120°C)
Wines			1	1	1			
X								
Xylene		C ₆ H ₄ (CH ₃) ₂	2	2	3			
Z								
Zinc Acetate		Zn(CH ₃ COO) ₂	2	1	1	1	1	
Zinc Chloride	Sol.Aq (Dil%)	ZnCl ₂	1	1	1	2		
Zinc Chloride	Sol.Aq (Sat%)	ZnCl ₂	1	1	1	1	1	
Zinc Chromate	Sol.Aq (Nd%)	ZnCrO ₄						
Zinc Cyanide	Sol.Aq (All%)	Zn(CN) ₂						
Zinc Nitrate	Sol.Aq (Nd%)	Zn(NO ₃) ₂	1	1	1	1	1	
Zinc Sulfate	Sol.Aq (Dil%)	ZnSO ₄	1	1	1	1	1	
Zinc Sulfate	Sol.Aq (Sat%)	ZnSO ₄	1	1	1	1	1	
Zinc Acetate		Zn(CH ₃ COO) ₂	2	1	1	1	1	
Zinc Chloride	Sol.Aq (Dil%)	ZnCl ₂	1	1	1	2		
Zinc Chloride	Sol.Aq (Sat%)	ZnCl ₂	1	1	1	1	1	
Zinc Chromate	Sol.Aq (Nd%)	ZnCrO ₄						
Zinc Cyanide	Sol.Aq (All%)	Zn(CN) ₂						
Zinc Nitrate	Sol.Aq (Nd%)	Zn(NO ₃) ₂	1	1	1	1	1	
Zinc Sulfate	Sol.Aq (Dil%)	ZnSO ₄	1	1	1	1	1	
Zinc Sulfate	Sol.Aq (Sat%)	ZnSO ₄	1	1	1	1	1	

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NOTES

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- Telecommunications and utility piping systems
- PVC, PVCO, CPVC, PP, ABS, PEX, FR-PVDF and PE pipe and fittings (1/4" to 48")
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- Plumbing and mechanical piping systems
- PE Electrofusion systems for gas and water
- Industrial, plumbing and electrical cements
- Irrigation systems



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