Note... This chart is meant to be used as a guide only and is based on average conditions. Since many factors should be considered, temperature, pressure, per cent of concentration, etc., much care should be taken before a final selection is made.

MATERIAL SELECTION GUIDE

The following chart was compiled as a guide for the selection of materials to be used in valve construction. This chart is meant to be used as a guide only and is based on average conditions.

Since may factors should be considered; I.e, temperature, pressure, per cent of concentration, etc., much care should be taken before a final selection is made. No guarantee of service life is intended

This chart was based on a temperature of 70 F. unless otherwise noted.

The per cent of concentration was based on 100% unless otherwise noted.

When chemicals are mixed it cannot be assumed that the same materials will give the same service conditions as listed on an individual basis.

In some instances the same recommendation is given to two or more materials for the same service. Under these conditions the user may have preference based on past experience.

The symbols used in the chart are as follows:

- A Generally should give satisfactory service with no adverse effects.
- B Generally a slight to moderate effect. Use only when nothing better is available.
- C Generally a moderate to severe effect. Considered as unsuitable.
- X Generally unsuitable under any condition.

Blank space indicates sufficient information lacking.

Valve material selection chart:

Note... This chart is meant to be used as a guide only and is based on average conditions. Since many factors should be considered, temperature, pressure, percent of concentration, etc., much care should be taken before a final selection is made.

			MET	TALS						SEATS	3		
		CAST STEEL				0		INE				Z	
	_	T S.1	BRONZE	S.S.	IEL	ALLOY20	BUNA_N	YEOPRENE		۸۲	SILICON	HYPALON	2
	RON	SAS	3RO	316	MONEL	NTTC	3CN,	Æ0,	ΞPΤ	BUTYL	ורוכ	1YP,	VITON
ACETALDEHYDE		В	Ā	A	_ <	Ā	X	X	P	X	X	_	
ACETATE-SOLVENTS		Α	Α	Α		Α							
ACETIC ACID 10%			Χ	Α	Α	Α	Α	Α		В	В	Α	Χ
ACETIC ACID 80%			Χ	Α		Α							1
ACETIC ACID 100%			Χ	Α		Α	X		В	В	В	С	X
ACETIC ANHYDRIDE	Χ	С	Χ	Α	Α	Α	Χ	Α		В		Ā	С
ACETONE	A	A	A	A	A	A	X	В	Α	В	Χ	В	C
ACETYL CHLORIDE				A									Ŭ
ACETAMINE	Α		Α	A									
ACETYLENE	A	Λ	A	A	Λ.	Α	D	В				В	Λ.
ACRYLONITRILE	C	Α			A	A	B						A
	_	Α	A	A	A	A	X	X	Λ	Λ	Λ	Λ	X
AIR	Α	Α	A	A	Α	Α	A	Α	Α	A	Α	A	A
ALCOHOLS	В	В	Α	Α	Α	Α	В	В		В		В	Α
ALCOHOL-AMYL	Α	В	Α	Α	Α	Α	Α	Α	Α	Α		Α	Α
ALCOHOL-BUTYL		В	Α	Α	Α	Α	Α	Α			С	Α	
ALCOHOL-ETHYL	Α			Α	Α	Α	Α			Α	В		
ALUMINUM ACETATE						Α							
ALUMINUM CHLORIDE		Χ	Χ	В	Α	Α	Α	Α		Α	Α	Α	Α
ALUMINUM NITRATE				Α									1
ALUMINUM SULFATE		Χ	С	В	Α	В	Α	Α		Α		Α	
ALUMS 10%	С	С	С	Α	С	В	Α	Α		Α		Α	Α
AMINES						Α	Α				В		1
AMMONIA ANHYDROUS	Α	Α	Χ	Α	В	Α	В	Α		В		В	С
AMMONIA SOLUTIONS	A	В	X	A	В	A	A	В			В		Ť
AMMONIUM ACETATE	A	В											
AMMONIUM BICARBONATE	A			Α	Α		Α	Α		Α		Α	Α
AMMONIUM CARBONATE			Α			Α	X	В		В		A	A
	A X	X	A X	A C	A B	A	B	A		В		A	A
AMMONIUM CHLORIDE	^	^	^	C	_	Α	Б	A		В		Α	Α
AMMONIUM FLUORIDE					A					_			
AMMONIUM HYDROXIDE	В	С	Χ	Α	С	Α	Α	Α		Α	В	Α	Α
AMMONIUM HYPOSULFITE				Α	Α								
AMMONIUM NITRATE	Α	В	Χ	Α	Α	Α	Α			Α		Α	
AMMONIUM PHOSPHATE				Α		Α				Α			
AMMONIUM SULFATE	С	X	С	В	В	В	Α	Α		Α	Α	Α	Α
AMMONIUM SULFIDE	Α			Α									
AMYL ACETATE	В	В	Α	Α	Α	Α	Χ	С	Χ	Χ		С	С
AMYL CHLORIDE	Α	Α	Α	Α	Α	Α	С	С			Χ	С	
ANILINE TO 80 DEGREES	С	В	С	Α	Α	Α	С	С	В	С		В	Α
ANODIZING PATH	Α	1	i e	Α				ì			i e		
ANTICHLOR SOLUTION						Α							
ARGON (dry)	1			Α									
ARMEEN	 			A	Α								
ARSENIC ACIDS	 	1	}	A	-7	Α	Α	Α		Α	Α	Α	
	Α	Α	Α	A	Λ		C	C		А	_ A	C	В
ASPHALT		A	A	Α	Α	Α	_			Λ	-	-	
BARIUM CARBONATE	Α		_				Α	Α		Α		Α	
BARIUM CYANIDE	<u> </u>	В	С	Α		Α							
BARIUM HYDROXIDE	В	С	Χ	Α	Α	Α	Α	Α		Α		Α	
BARIUM SULFIDE		С	Χ	Α		Α	Α	Α		Α		Α	

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METALS	SEATS	
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Note... This chart is meant to be used as a guide only and is based on average conditions. Since many factors should be considered, temperature, pressure, percent of concentration, etc., much care should be taken before a final selection is made.

		111				_		¥				>	
		STI	ZE	S.	_1	. 20	≥.	ζEI			Z	Ō.	
	>	. L	N.	S.S	Æ	ò	₹	P _F		7	8	λΑΓ	ΝC
	RON	CAST STEEL	BRONZE	316 S.	MONEL	ALLOY 20	BUNA_N	YEOPRENE	EPT	BUTYL	SILICON	HYPALON	VITON
BATTERY ACID	*	0	В	3	>	Ā	В		Щ	В	Ŋ	1	>
BEER	С			Α	Α	A	С	В		В	В	Α	Α
BEET SUGAR LIQUIDS	A	В	С	A	A	A	A	В		В	В	A	A
BENTONITE	A												
BENZENE-BENZOL	A	Α	Α	Α	Α	Α	X	С	С	X		С	В
BENZALDEHYDE	A	A	A	A	A	A		C	В	Ĉ		C	С
BENZOIC ACID		C	X	A		A							
BERYLLIUM SULFATE						A							
BICARBONATE LIQUOR	Α												
BLACK LIQUOR	A						Α	Α				Α	
BLACK SULFATE LIQUOR		В		Α		Α	A	A				A	
BLOOD				A									
BORAX LIQUORS	Α	В		A			Α	Α				Α	
BORIC ACID	C	В	С	A	Α	Α	A	A	Α			A	Α
BRAKE FLUIDS	A		Ŭ										
BRINE-ALKALINE	A			Α	Α		В	В				В	
BROMINE SOLUTION	X	Χ	Χ	В	В		С	С	С			В	Α
BROWN LIQUOR	A						Ŭ	Ŭ					
BUTANE	A	Α	Α	Α	Α	Α	Α	Α	В	С		Α	
BUTYLENE	A	A	A	A	A	A	В						
BUTADIENE	В		X	A	В	A	С	С				С	В
BUTYRIC ACID				A	В	A	С	C				— ́	
BUTYL ACETATE	Α	Α	Α	A	A	A		С	Χ			С	С
BUTYL AMINE	A			A					^				
BUTYL CHLORIDE					Α								
BUTYL ETHER(dry)	Α				A								
CADMIUM PLATING BATH	A				- / 1								
CALCIUM BISULFITE	X	С	С	В	В	В	Α	Α		Α		Α	Α
CALCIUM CHLORIDE	C	В	A	В	A	В	A	A		A		A	71
CALCIUM CHLORATE	0			A	71	A	- ' '						
CALCIUM HYDROXIDE	В	В	Χ	A	Α	A	Α	Α		Α		Α	
CALCIUM PHOSPHATE	A												
CALCIUM SILICATE	A												
CACIUM SULFATE	A	В	Α	Α		Α	Α	Α		Α		Α	
CAMPHOR	,,		, ·	, ,			- ' '						
CANE SUGAR LIQUORS	В	Α	Α	Α	Α	Α	Α	В				В	В
CARBITOL	A			A									
CARBOLIC ACID(phenol)	- / \	С	С	A		Α							
CARBON BISULFIDE	В	В	В	A	Α	A	С	С				С	Α
CARBON DIOXIDE	A	A	A	A	A	A	В	A				A	71
CARBON DISULFIDE	, 1			A	- ' '	A	С	C		С		C	
CARBON MONOXIDE	Α			, 1			Ť	A		Ť		A	
CARBON TETRACHLORIDE	В	С	В	Α	Α	Α	Α	C	С	Χ	Χ	C	Α
CARBONIC ACID		С	С	A	- ' '	A		Ť				Ť	
CARBONATED BEVERAGES		Ť	Ť	A			Α	Α		Α		Α	
CASEIN	Α			A	Α	-							
CASTOR OIL	A			A	- ' '		Α	Α		В		Α	
CATSUP				A	Α		A						

METALS	SEATS
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Note... This chart is meant to be used as a guide only and is based on average conditions. Since many factors should be considered, temperature, pressure, percent of concentration, etc., much care should be taken before a final selection is made.

	IRON	CAST STEEL	BRONZE	316 S.S.	MONEL	ALLOY 20	BUNA_N	YEOPRENE	EPT	BUTYL	SILICON	HYPALON	VITON
CAUSTIC SOLUTIONS		В	X	Α		Α							
CELLULOSE ACETATE	Α			Α	Α								
CHLORACETIC ACID	С		В	С	В	Α	С	Α				Α	С
CHLORAMINE													
CHLORINATED SOLVENTS	Α			Α									
CHLORINE(dry)	В	С	С	В	В	Α	С	В	Χ			В	Α
CHLORINE(wet)	Χ	Χ	Χ	Χ	Χ	Χ	С	С	Χ			В	
CHLOROBENZENE	Α	В	Α	Α	Α	Α	X	Χ	Χ			Χ	Α
CHLOROFORM(dry)	Α	В	Α	Α		Α	С	С	С	Χ		С	Α
CHLOROPHYLL	Α			Α	Α								
CHLOROFULFONIC ACID(dry)		В	В	В	В	Α		С	Χ	Χ		С	Χ
CHLOROSULFONIC ACID(wet)	Χ	Χ	Χ	Χ	Χ	Χ		С	Χ	Χ		С	Χ
CHROME ALUM				Α		Α							
CHROME LIQUOR						Α							
CHROMIC ACID 10%	С	Χ	Χ	Α	В	Α	С	С		С		Α	
CHROMIC ACID 50%	С	Χ	Χ	С	С	В	С	С		С		Α	
CHROMIUM SULFATE				Α		Α							
CITRIC ACID	С	Χ	С	Α	Α	Α	Α	Α		В		Α	
COAL TAR	Α			Α	Α	Α	В	С	Χ	С		С	
COCONUT OIL	Α						Α	В		В		В	
COFFEE				Α	Α	Α	Α	Α		Α		Α	
COKE OVEN GAS	Α	В	С	Α		Α						Α	
CONDENSATE	Α												
COOKING OIL	В		В	Α	Α		Α	В				В	Α
COPPER ACETATE		Χ	Χ	Α		Α							
COPPER CHLORIDE	С		С	В	В		Α	Α		Α		Α	
COPPER CYANIDE	Α												
COPPER SULFATE	С	С	Χ	Α	Α	Α	Α	Α				Α	
CORE OIL	Α												
CORN KERNELS				Α	Α								
CORN OIL				Α	Α		Α	Α		В		Α	
CORN SYRUP				Α	Α		Α	Α		В		Α	
CREOSOTE	Α	В	В	Α	Α	Α	В	С	X		С	С	Α
CRESYLIC ACID 50%				Α	Α	Α	С	С		С			
CYANIDE SOLUTION	Α												
CYANOGEN GAS				Α									
CYCLO HEXANE	Α	Α	Α	Α	Α	Α	Α	С	С	X		С	Α
DEIONIZED WATER				Α									
DETERGENTS	Α			Α									
DEVELOPER-PHOTO				Α	Α								
DEXTRIN				Α	Α								
DIACETONE ALCOHOL	Α	Α	Α	Α	Α	Α	С	В			В	В	
DICHLORD ETHYL ETHER					Α	Α							
DIESTER LUBE'S	Α			Α									
DIETHYLAMINE	Α	Α	Α	Α	Α	Α	Α						
DIETHYL SULFATE					Α	Α							
DIETHYLENE GLYCOL	Α						Α	Α		В		Α	
DIMETHYL FORMAMIDE					Α	Α							

METALS	SEATS	

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	IRON	CAST STEEL	BRONZE	316 S.S.	MONEL	ALLOY 20	BUNA_N	₩ YEOPRENE	ЕРТ	BUTYL	SILICON	HYPALON	VITON
DIOXANE(dry)	Α						Α	В		В		В	
DIPENTENE-PINENE				Α		Α	Α			В			
DOWTHERMS	Α	Α	Α	Α	Α	Α	X	В				В	Α
DYES(general)	Α	Α	Α	Α	Α	Α							
ENZYME SOLUTION				Α		Α							
ETHERS(butyl)	Α	Α	Α	Α	Α	Α	С	С		С		С	С
ETHYL ACETATE	В	В	В	Α	Α	Α	С	С	С	С		С	С
ETHYL ACRYLATE				Α									
ETHYL ALCOHOL		В	Α	Α		Α	Α	Α	Α	Α	В	Α	Α
ETHYL BROMIDE				Α	Α	Α							
ETHYL CHLORIDE(dry)	Α	Α	Α	Α	Α	Α	В	В	X	В		В	
ETHYL CHLORIDE(wet)						Α	С	С		С		С	
ETHYL SILICATE	Α			Α			Α						
ETHYLENE				Α	Α		Α			В			
ETHYLENE GLYCOL	Α	Α	Α	Α	Α	Α	Α	Α	Α	Α		Α	Α
ETHYLENE OXIDE				Α		Α	X	X	X			Χ	С
FATTY ACIDS	С	В	В	Α	Α	Α	В	В				В	Α
FERRIC CHLORIDE SOL.		X	X	С		С	В	В		В		В	
FERRIC NITRATE				Α		Α		Α		Α		Α	
FERRIC SULFATE (DIL)	С		С	В	С	Α	Α	Α		Α		В	Α
FERROUS CHLORIDE		X	X	В			Α	Α		Α		Α	
FERROUS SULFATE 10%		С		Α	Α	Α	Α	Α		Α		Α	
FERROUS SULFATE 100%		X	Χ	Α	Α	Α	Α	Α		Α		Α	
FERTILIZER SOLUTION	Α			Α	Α								
FISH OIL	Α			Α	Α		Α						
FLUE GAS	Α			Α		Α							
FLUORIDE SALTS				Α									
FLUORINE (dry)	X	X	X	Χ	В	В							
FORMALDEHYDE (cold)	В	С	Α	Α	Α	Α	Α	Α		Α		Α	Α
FORMIC ACID	С		В	Α	В	Α	С	Α		В		Α	С
FREON (most)	В	В	В	Α	Α	Α	Α	Α	X			Α	Α
FRUIT JUICES	С		В	Α	Α	Α	Α	Α		Α		Α	Α
FURFURAL	Α		В	Α	Α	Α	С	В		С		В	С
FURNACE GAS	Α												
GALLIC ACID 5%				Α		Α	Α	Α		Α		Α	
GAS-NATURAL	Α		Α	Α	Α	Α	Α	Α				Α	Α
GASOLINE-MOTOR	Α	Α	Α	Α	Α	Α	Α	В	С	Χ	X	В	Α
GELATINE		В	С	Α	Α	Α	Α	Α		Α		Α	
GLUCOSE	В	Α	Α	Α	Α	Α	Α	Α		Α		Α	Α
GLUE (most)	Α	Α	Α	Α	Α	Α	Α	Α		Α		Α	
GLYCERINE	В			Α	Α	Α	Α	Α		Α		Α	Α
GLYCEROL	В	В	В	Α	Α	Α	Α	Α		Α		Α	Α
GLYCOLIC ACID				Α	Α	Α							
GLYOXAL				Α									
GLYCOL AMINE				Α	Α	Α							
GRAPHITE	Α			Α	Α								
GREASE-EDIBLE				Α			Α						
GREEN LIQUOR				Α								В	Α

METALS	SEATS	I

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	IRON	CAST STEEL	BRONZE	316 S.S.	MONEL	ALLOY 20	BUNA_N	YEOPRENE	EPT	BUTYL	SILICON	HYPALON	VITON
HELIUM GAS	Α												
HEPTANE-HEXANE	Α	Α	Α	Α	Α	Α	Α	Α		С		Α	Α
HEACHLOROBENZENE					Α	Α							
HEXANOL-TERTIARY	Α	Α	Α	Α	Α	Α				С			
HYDRAZINE													
HYDROBROMIC ACID	X	Х	X	Χ	Χ	Χ	Α	Α				Α	
HYDROCHLORIC ACID (cold)	Χ	Χ	Χ	Χ	Χ	Χ	X	Α		В	В	Α	Α
HYDROCYANIC ACID	С		X	Α	В	Α	В	Α				Α	
HYDROFLUORIC ACID	X	С	Χ	Χ	В	C	В	A		В		Α	
HYDROFLUOSILICIC ACID		X	Α	С	В	В	Α	Α				Α	
HYDROGEN GAS	Α	В	В	A	A	Ā	Α	Α				Α	
HYDROGEN PEROXIDE	C	X	X	A	В	В	В	В			В	Α	Α
HYDROGEN SULFIDE (dry)	A	X	X	A	A	A	В	A				A	
HYDROGEN SULFIDE (wet)	C	X	X	В	В	В	C	В		В		В	
ILLUMINATING GAS	A	A	A	A	A	A	Ť						
IODINE SOLUTION	X	X	X	В	В		В	В					Α
IRON OXIDE	A												71
ISO-OCTANE	A	Α	Α	Α	Α	Α	Α	Α				Α	
ISOPROPYL ALCOHOL	A	A	A	A	A	A	В	A		В		A	Α
ISOPROPYL ETHER	A	A	A	A	A	A	A	C	Х			В	
JET FUELS	A		A	A	A		A	С	X	Χ		С	Α
JUICES - FRUIT				A									
KELP SLURRY	Α												
KEROSENE	A	Α	Α	Α	Α	Α	Α	В	Χ	Χ		В	Α
LACQUERS-SOLVENTS	A	A	A	A	A	A	Ĉ	C	_^	Ĉ		C	C
LACTIC ACID (diluted)	C	X	X	A	В	A	В	A		В		A	C
LACTIC ACID 100%	C	X	X	В	В	A	В	A		В		A	
LACTOSE		^	^	A	A								
LEAD SULFATE	Α			А	А								
LECITHIN	А			Α		Α							
LIME-SULPHUR MIX	1			A	Α		Α	Α				Α	
LINOLEIC ACID				A	А	Α	_A	A				A	
LINSEED OIL	Α		В	В	В	A	Α	Α		Α		Α	Α
LITHIUM CHLORIDE	А		В	Ь	A		_A	A		A		A	А
LUDOX				Α	A								
MAGNESIUM BISULFATE			Α	А	Α								
MAGNESIUM BISULFIDE			A		А								
MAGNESIUM CARBONATE	Α												
MAGNESIUM CHLORIDE	C	С	C	В	Λ	Λ	Λ	Λ		Λ		Λ	
			C		A	A	Α	Α		A		Α	
MAGNESIUM SULFATE (liq) MALEIC ACID	Α	Α	Α	A	A	A	Λ	Λ		A		Λ	
MALEIC ACID MALEIC ANHYDRIDE	-			A	Α	A A	A	Α		A A		Α	
MALT SLURRY	-			A	Α	Α	A	Α		- 4		Λ	
MAGANESE SULFATE				Α	Α	Λ	Α	Α				Α	
	-			Λ		Α							
MANNITOL SOLUTION	-			A									
MENTHOL MERCURIC CHLORIDE	\ <u>/</u>	\ <u>'</u>	\ <u>/</u>	A	Г.	_	_	Α				Α	
	Χ	Χ	Χ	В	В	В	В	Α				Α	
MERCURIC CYANIDE	<u> </u>]	Α		Α							

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METALS	SEATS
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	IRON	CAST STEEL	BRONZE	316 S.S.	MONEL	ALLOY 20	BUNA_N	YEOPRENE	1d 3	BUTYL	NODITIS	HYPALON	VITON
MERCUPIC NITRATE				Α									
MERCURY	Α	Α	Χ	Α	В	Α	Α	Α		Α		Α	
MENTHANE (use butane)													
METHYL ACETATE	Α	В		Α		Α	С	С				С	
METHYL ACETONE	Α	Α	Α	Α	Α	Α							
METHYL ALCOHOL	Α	Α	Α	Α	Α	Α	Α	Α		В		Α	В
METHYL BROMIDE				Α									
MENTHYLAMINE		Α	Χ	Α		Α							
METHYL CELLOSOLVE	Α	Α	Α	Α	Α	Α	С	В		В		В	
METHYL CHLORIDE (wet)	В	В	В	Α	Α	Α	С	С			X	С	
METHYL ETHYL KETONE	В	В	В	Α	Α	Α	Χ	Χ	Α	В		Χ	С
METHYL FORMATE		_	Α	_			_						
METHYLENE CHLORIDE	В	В	Α	Α	В	Α	С	С	В			С	В
MILK	С		В	Α	Α	Α	Α	Α		Α		Α	Α
MINERAL OIL	Α		Α	Α	Α		Α	Α	Χ	Α		Α	
MIXED ACIDS (cold)	С	X	X	Α	В	Α	X	X					Α
MOLASSES	Α	В	В	Α		Α	Α	Α		Α		Α	Α
MONOCHLOR ACETIC ACID				_	Α			В				В	
MORPHOLINE	Α	_	4	A	_	_	•		_				
NAPHTHA	Α	A	A	A	A	A	A	С	С	С		С	Α
NAPHTHALENE	A	A	A	A	A	A	X	C	Χ	Χ		C	
NATURAL GAS	Α	Α	С	Α	Α	Α	Α	Α				Α	
NICKEL AMMONIA SULFATE NICKEL CHLORIDE	.			A C		В		_					
NICKEL CHLORIDE NICKEL SULFATE				A	В	A	A	A A		Α		A	
NICOTINIC ACID			В	A	A	А	A	А		А		A	
NITRIC ACID 10%	С	Χ	X	В	В	Α	С	В	С	В	В	Α	Α
NITRIC ACID 10%	X	X	X	В	В	A	X	С	C	X	X	В	A
NITRIC ACID 80% NITRIC ACID ANHYDROUS	^	X	X	A	В	A	^		C	^	^	В	A
NITROBENZENE	Α			A	Α	A	С	С	Α	В		С	В
NITROGEN GAS	A									В			
NITROUS GASES		В	Χ	Α	В	Α							
OILS, ANIMAL	Α	A	A	A	A	Α	Α	В				В	
OIL, COTTONSEED				A	A	Α	A	Ā	В	С		A	Α
OIL, FISH	Α		С	Α	Α	Α	Α	В		_		В	
OIL, FUEL	Α	Α	В	Α	Α	Α	Α		Χ	С			
OIL, LUBE	Α	Α	Α	Α	Α	Α	Α		Χ	С			
OIL, MINERAL	Α	Α	Α	Α	Α	Α	Α	Α	Χ	Χ		Α	
OIL, PETROLEUM		Α	В	Α	Α	Α	Α			С			
OLEIC ACID	С	В	Χ	Α	Α	Α	Α	В		С		В	В
OLEUM SPIRITS	С	Χ	Χ	Α	В	Α	С	С		С		С	Α
OXALIC ACIDS (cold)	С	Χ	Χ	Α	В	Α	С	Α		В		В	Α
OXYGEN	Α	В	Α	Α	Α	Α	В	В		В		В	
OZONE (dry)		Α		Α	Α	Α							
OZONE (wet)				Α	Α								
PAINTS-SOLVENTS	Α	Α	Α	Α	Α	Α							
PALMITIC ACID	С		В	Α	Α	Α	В	В				В	Α
PAPER PULP	Α			Α	Α								

	_
METALS	SEATS
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		75						ш					
		CAST STEEL	Ä			20	>	YEOPRENE			>	NO	
	>	TS	BRONZE	S.S.	MONEL	ALLOY 20	BUNA_N	PR		BUTYL	SILICON	HYPALON	2
	RON	;AS	, RC	316 S.	101	77	Ş	Œ	EPT	7.7	ודע	₹	VITON
PARAFFIN OILS	A	0	9	8	_ ≥	4	A	A	Щ	9	S	A	_ >
PERCHLORETHYLENE	A	Α	В	Α	Α	Α	A	X				C	Α
PERMANGANIC ACID				Α									1
PEROXIDE BLEACH		1		Α	Α								1
PHENOL	С	1	В	Α	В	Α	X	В		В		В	Α
PHENOLIC GLUE	Α	1											1
PHOSPHORIC ACID 10%		Χ	X	Α	Α	Α	Α			В		Α	
PHOSPHORIC ACID 50%	С	Χ	X	В	С		Α	Α				Α	Α
PHOSPHORIC ACID 100%		Χ	Χ	В	Α		X	Α	Α	В		Α	
PHOSPHORIC MOLTEN				Α		Α							
PHOTOGRAPHIC SOLUTIONS				Α	В								1
PICRIC ACID SOLUTION	С		В	Α	Α	Α	В	Α		В		Α	
PINE OIL	Α			Α	Α	Α	Α	В					Α
PLASMA				Α									
POLYSULFIDE LIQUOR	Α			Α									
POLYVINYL ACETATE													
POLYVINYL CHLORIDE				Α									
POTASSIUM ACETATE				Α			Α						
POTASSIUM BROMIDE				Α			Α	Α		Α		Α	
POTASSIUM CARBONATE	Α			Α	Α		Α	Α		Α		Α	
POTASSIUM CHLORIDE SOL.	Α		Α	В	Α	Α	Α	Α		Α		Α	
POTASSIUM CHROMATE				Α			Α	Α				Α	
POTASSIUM CYANIDE SOL.	Α	Α	X	Α	Α	Α	Α	Α				Α	
POTASSIUM DICHROMATE	Α		С	Α	Α	Α	Α	Α		Α		Α	
POTASSIUM HYDROXIDE	Α		Χ	Α	Α	Α	Α	Α		Α		Α	
POTASSIUM NITRATE	Α	Α	В	Α	Α		Α						
POTASSIUM PHOSPHATE				В			Α	Α		Α			
POTASSIUM SULFATE	Α	Α	Α	Α	Α	Α	Α	Α				Α	
POTASSIUM SULFIDE	Α	Α		Α		Α							
POTASSIUM SULFITE		_		Α		Α	_						
PROPANE GAS	Α	Α	Α	Α	Α	Α	Α	Α				Α	Α
PROPYL ALCOHOL	Α	Α	Α	Α	Α	Α	Α	Α				Α	
PROPYL BROMIDE						Α							
PROPYLENE GLYCOL				A	_								
PYROLE	_			A	A	A							
RESINS	Α	C	A	A	A	A	С	C					_
ROAD OILS	Α	Α	Α	A	Α	A	В	С					Α
SALAD OILS				A	_	Α							.
SALICYCLIC ACID				Α	A		A	A				A	_
SALT. BRINE SEA WATER	В		A	A	A		A	A				A	A
SEWAGE	C A	С	Α	B A	A	Α	Α	Α		Α		Α	Α
SHELLAC	A	Α	Α	A	A	Α							
SILICON FLUIDS	A	A	A	Α	A	Α		-					-
SILVER CYANIDE	H		 		А			 		 	 	 	├
SILVER CYANIDE SILVER IODINE	}		 	Α	Α			 		 	 	 	├
SODIUM ACETATE	Α	В	Α	A		Α							
SODIUM ALUMINATE	A	A	_ ^	A	Α	A	Α	Α		Α		Α	-
SODIOW ALUWINA I E	А	А		7	А	А	А	А		А		А	

METALS	SEATS	

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	IRON	CAST STEEL	BRONZE	316 S.S.	MONEL	ALLOY 20	BUNA_N	YEOPRENE	EPT	BUTYL	SILICON	HYPALON	VITON
SODIUM ARSENATE	Α												
SODIUM BICROMATE				Α		Α							
SODIUM BISULFATE				Α		Α	Α	Α		Α		Α	
SODIUM CARBONATE SOL.	Α	В	В	Α	Α	Α	Α	В		В	В	В	Α
SODIUM CHLORATE						В							
SODIUM CHLORIDE	Α	В	Α	Α	Α	Α	Α	В		В	В	В	Α
SODIUM CYANIDE	Α	Α	Χ	Α	Α	Α	Α	Α				Α	
SODIUM FLUORIDE	Α			Α							Α		
SODIUM HYDROSULFIDE				Α	Α								
SODIUM HYDROXIDE 20%	Α	В	Α	Α	Α	Α	Α	Α	Α	Α	В	Α	Α
SODIUM HYDROXIDE 50%	Α	В	Α	Α	Α	Α	Α	Α		Α	В	Α	Α
SODIUM HYDROXIDE 70%	Α		Α	Α	Α	Α	Α	В		Α		Α	
SODIUM HYPOCHLORITE 20%	Χ	Χ	Χ	В		С			Α			Α	Α
SODIUM METAPHOSPHATE			С	Α	Α	Α	Α	Α	Α			Α	
SODIUM METASILICATE	Α			Α	Α		Α	Α				Α	
SODIUM NITRATE	Α	Α	В	Α	Α	Α	Α	Α		Α		Α	
SODIUM PERBORATE			С	Α		Α	Α	Α				Α	
SODIUM PEROXIDE	С		С	Α	Α	Α	В	Α				Α	
SODIUM PHOSPHATE	Α			Α	Α	Α	Α						
SODIUM SILICATE	Α		С	Α	Α		Α	Α					
SODIUM SULFATE		Α	Ā	Α	Α	Α	Α						
SODIUM SULFIDE	Α	Α	Χ	Α	Α	Α	Α	Α				Α	Α
SODIUM SUFITE				Α	Α	Α							
SODIUM THIOSULFATE			Х	Α	Α	Α	Α	Α				Α	
SOYBEAN OIL	Α		В	Α	Α		Α	Α				Α	Α
STARCH	Α			Α	Α		Α	Α				Α	
STEAM LOW PRESSURE	Α		Α	Α	Α		С	С	Α		Α	В	В
STEARIC ACID	С	С	С	Α	Α	Α	Α	В		С		В	
STYRENE (dry)	Α	Α	A	Α	Α	Α	X						
SULFAMIC ACID						Α							
SULFITE LIQUOR				Α									
SULFONIC ACIDS		1				Α							1
SULPHUR	С	С	X	В	Α	Α	В	Α	Α			Α	Α
SULPHUR DIOXIDE (dry)	Α	Α	Α	Α	Α	Α	Α	Α			В	Α	
SULPHUR TRIOXIDE (dry)	Α	Α	Α	Α	Α	Α		С				С	
SULFURIC ACID 10%	Χ	Χ	Χ	Α		Α	Α	Α		Α	В	Α	Α
SULFURIC ACID 75%				В	В	В	Χ	В				Α	
SULFURIC ACID 100%	В			Α	Α	Α	Χ	С	С	Χ	Χ	Α	Α
SULFUROUS ACID	С		Χ	В	С	Α	С	Χ				Α	Α
TALL OIL	A			A	Ā	Α							
TANNIC ACID	В			Α	Α	Α	В	Α		Α		Α	Α
TAR	A	Α	Α	Α	Α	Α				Χ	Χ		
TARTARIC ACID		В	В	Α	Α	Α	Α	Α		В		Α	
TOLUOUL-TOLUENE	Α	Α	Α	Α	Α	Α	Χ	С	С	С		С	В
TRIBUTYL PHOSPHATE				Α		Α	С	C	X			C	С
TRICHLOROETHYLENE				Α	Α	Α	Ť	C				C	A
TUNG OIL	Α		Α	Α	В		Α	Ā				Ā	Α
TURPENTINE	A	С	В	Α	A		A	C	С	В		C	A

METALS	SEATS	

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															ZINC SULFATE	ZINC CHLORIDE	ZINC BROMIDE	ZINC ACETATE	XYLENE-XYLOL	WHITE LIQUOR	WHISKEY	WAXES	WATER SALT	WATER, DISTILLED	WATER, MINE ACID	WATER, HEAVY	WATER, FRESH	VINYL ACETATE	VINEGAR	VARNISH	
																C			Α	Α	×	Α	Α				Α			Α	IRON
																×			Α		:	Α					Α			C	CAST STEEL
															Α	С			Α	ı	В	נע	>				Α			Α	BRONZE
															Α	В	Α	Α	Α		Δ:	Δ (0	Α	Α	Α	Α	Α	Α	Α	316 S.S.
															Α	Α			Α		Δ:	נע	>	Α	Α	Α	Α		В	Α	MONEL
							Ì							Ì	Α	Α			Α	:	Δ:	D I	>	Α	Α		Α		Α	Α	ALLOY 20
П															Α	Α		Α	×		Α:	ו מ	>				Α		Α		BUNA_N
																Α		Α	×		ÞΙ	В	> A	· A			Α		Α		YEOPRENE
																			C				Α	· A	Α	Α	Α				EPT
																Α			×			1	>	Α			Α			В	BUTYL
																								Α			Α				SILICON
																Α		Α	C	:	Α	1	> A	· A			Α		Α		HYPALON
																Α			Α	:	Δ:	D I	> A	В			Α				VITON