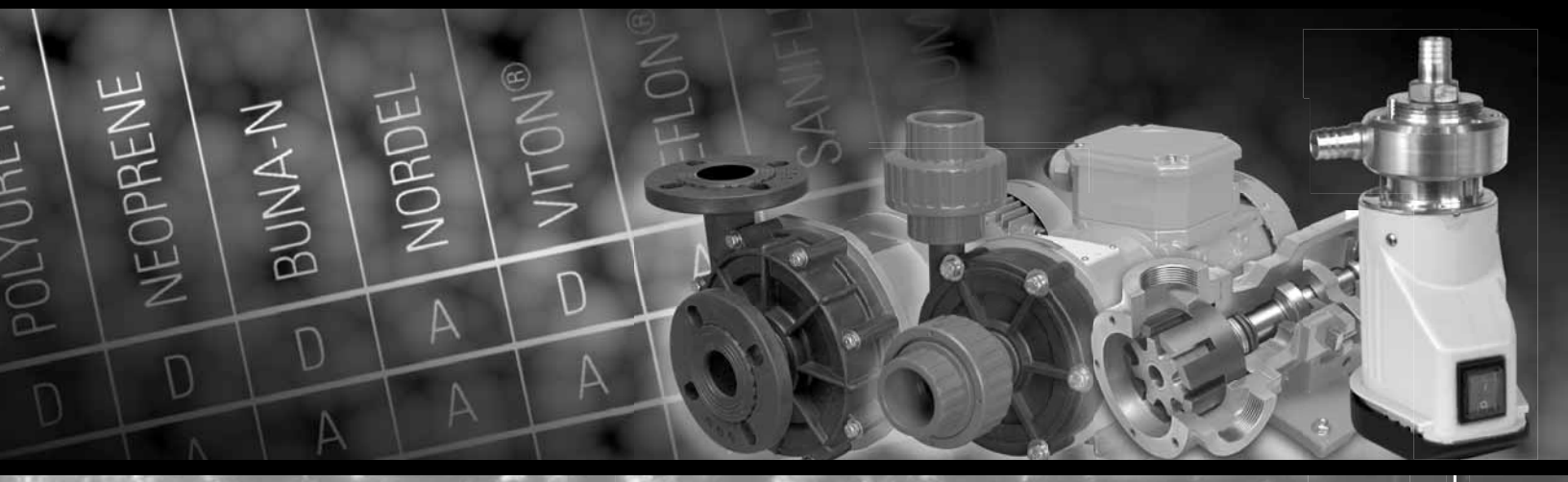
TYPHOON CHEMICAL RESISTANCE

GUIDE



Compatibility Listings

WILDEN®

A DOVER COMPANY

WIL-21100-C-01

22069 Van Buren Street
Grand Terrace, California 92313-5607
Telephone (909) 422-1730 • FAX (909) 783-3440
www.wildenpump.com

TYPHOON™ PROCESS EQUIPMENT

WILDEN® A DOVER COMPANY

CHEMICAL RESISTANCE GUIDE

This information is compiled from numerous sources and believed to be reliable to this date. **It is intended as a guideline to be used with all available information to determine suitability of wetted portions of Typhoon pumps for various applications.** We suggest thorough research, which should include known applications when determining pump selection. This chart is to be used at your discretion and risk. The accuracy of these ratings cannot be guaranteed.

SELECTING THE BEST WETTED MATERIAL FOR A TYPHOON PUMP

In the absence of previous experience, (which is always the best guide) wetted materials may be selected from the available resistance charts. The Typhoon Chemical Resistance Guide is compiled from numerous reliable sources and cross-checked, however, it is only intended as an additional source of information.

Pump life not only depends on chemical compatibility with the process fluid but also on the process conditions. These conditions will vary depending on the abrasiveness of your process fluid, temperature, size of pump, pumping media, and lift conditions. Consult your authorized Typhoon distributor regarding which wetted material will work best for your application requirements.

TEMPERATURE CAUTION: Temperature limits are based upon mechanical stress only. Certain chemicals will significantly reduce maximum safe operating temperatures. Consult engineering guides for chemical compatibility and temperature limits.

It must be emphasized that none of these figures are absolute and are only general guidelines.

SELECTION OF PLASTIC MATERIALS

Many factors can affect the chemical resistance of plastics. These include, but are not limited to, exposure time, extremes of temperature and pressure, frequency of temperature and/or pressure cycling, attrition due to abrasive particles, and the type of mechanical stress imposed. The fact that certain combinations of chemicals and mechanical load can induce stress cracking in many otherwise chemically resistant materials, both metallic and non-metallic, is of particular significance.

The chemical / temperature ratings presented are based on well-processed or well fabricated test specimens being essentially resistant to either chemical attack and/or severe swelling which would normally impair their performance under moderate mechanical stresses.

Operating parameters are dependent upon the particular application, and may differ from those experienced in either laboratory testing or apparently similar field service. Because corrosive fluids or vapors are often mixtures of various individual chemicals, it is strongly recommended that trial installations be evaluated under actual service conditions.

For example, immersion testing in individual chemicals at a specific operating temperature doesn't predict the performance of a material should an exothermic reaction take place when mixtures of chemicals are involved.

The ratings given on the following pages are a guide and do not constitute a warranty of any kind, expressed or implied, with respect to the performance of the materials Typhoon offers in any specific application.

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CHEMICALS	ELASTOMERS				METALS									PLASTICS						
	BUNA-N	VITON®	EPDM	PTFE (TEFLON®)	ALUMINUM	BRONZE	CARBON GRAPHITE	GRAY IRON	DUCTILE IRON	STAINLESS STEEL (316)	995 CERAMIC (AL2O3)	TUNGSTEN CARBIDE	SSiC	NYLON	CARBON-FILLED ACETAL (CFA)	ETFE	POLYPROPYLENE	RULON®	PEEK	PVDF
ACETALDEHYDE	D	D	A	A	B	A	A	C	A	A	-	A	-	B/70	A	A/212	C	A	A	D
ACETAMIDE	A	A	A	A	A	D	A	D	A	A	-	-	-	B/120	A	A/250	A/70	-	-	A/140
ACETATE SOLV	D	-	C	A	B	C	A	D	D	A	-	A	-	A	-	A/175	B/72	-	-	A
ACETIC ACID, GLACIAL	D	D	B	A	B	C	A	D	D	A	A	C	A	D	D	A/250	A/100	-	A	A/120
ACETIC ACID	C	C	A	A	B	C	A	D	D	A	A	C	A	D	D	A/250	B/70	-	A	A
ACETIC ANHYDRIDE	D	D	B	A	B	C	A	D	D	A	A	A	-	D	D	A/250	C	-	-	B/70
ACETONE	D	D	A	A	A	A	A	A	A	A	A	A	A	B/120	A	A/212	D	A	A	D
ACETONITRILE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A/212	-	-	A	-
ACETOPHENONE	D	D	A	A	B	-	-	-	A	B	-	-	-	A	-	A/250	A/70	-	-	A/70
ACETYL CHLORIDE	D	B	C	A	D	-	-	B	A	B	-	-	-	D	-	A/212	-	-	-	A/120
ACETYLENE	A	A	A	A	A	C	A	A	A	A	-	-	-	A	A	-	B/72	-	-	A
ACRYLONITRILE	D	D	D	A	B	-	B	A	A	A	-	A	-	B/70	-	A/140	B	-	-	A/70
ADIPIC ACID	B	-	-	A	B	-	A	A	B	B	-	-	-	-	-	A/175	B	-	-	B
ALCOHOLS:						-	-	-			-	-	-					-	-	
ALLYL	-	-	-	-	-	-	-	-	-	-	-	A	-	-	-	A/212	-	-	-	-
AMYL	B	B	A	A	B	A	A	B	B	A	A	A	-	A	A	-	B	-	-	A
BENZYL	D	A	C	A	B	A	-	B	B	A	A	-	-	D	A	-	A/70	-	-	A
BUTYL	A	A	A	A	B	A	A	B	B	A	A	A	-	A	A	-	B	-	-	A
DIACETONE	D	D	B	A	A	A	A	A	A	A	-	A	-	A	A	-	B/72	-	-	A/70
ETHYL	A	A	A	A	B	A	A	B	A	A	A	A	-	B	A	-	A	-	-	A
HEXYL	A	A	B	A	A	A	-	A	A	A	-	-	-	A	A	-	A/70	-	-	A
ISOBUTYL	C	A	A	A	B	A	A	C	C	A	-	-	-	B/70	A	-	-	-	-	A
ISOPROPYL	C	A	B	A	B	A	A	A	C	A	A	A	-	B/70	A	A/140	A	-	-	A/150
METHYL	A	D	B	A	B	A	A	A	A	A	A	A	A	B/70	A	-	A/120	-	A	A
OCTYL	B	A	A	A	A	A	-	A	A	A	-	-	-	A	A	-	-	-	-	-
PROPYL	A	A	B	A	A	A	A	A	A	A	A	-	-	B	A	-	A	-	-	A/120
ALLYL CHLORIDE	-	-	-	-	-	-	-	-	-	-	-	B	-	-	-	A/212	-	-	-	-
ALKAZENE	D	A	D	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ALUM-NH3-CR-K	A	D	A	A	-	-	-	-	-	-	-	-	-	-	-	A/250	-	-	-	A
ALUMINUM ACETATE	C	D	A	A	A	-	-	-	D	B	-	-	-	-	-	-	-	-	-	-
ALUMINUM CHLORIDE 100%	-	-	-	-	-	D	A	D	-	-	A	-	A	-	-	A/212	-	A	-	-
ALUMINUM CHLORIDE 20%	A	A	A	A	B	D	A	D	D	C	A	D	-	D	C	-	A	-	-	A
ALUMINUM FLUORIDE	A	-	B	A	B	-	A	D	D	C	-	-	-	B/70	C	A/250	A	-	-	A
ALUMINUM HYDROXIDE	A	A	A	A	A	C	A	A	D	A	-	-	A	B/70	A	A/250	A	-	-	A
ALUMINUM NITRATE	A	A	A	A	B	-	A	-	D	A	-	-	-	B/70	B	A/250	A	-	-	A
ALUMINUM PHOSPHATE	A	A	A	A	-	-	-	-	-	A	-	-	-	-	-	-	-	-	-	-
ALUMINUM POTASSIUM SULFATE (ALUM)	A	A	A	A	B	-	A	D	D	A	-	-	-	D	C	-	A	-	-	A
ALUMINUM SULFATE	A	A	A	A	C	B	A	D	D	A	A	D	A	A/120	B	A/100	A	A	-	A
AMINES	D	D	-	-	A	D	A	D	D	A	-	A	-	D	D	-	-	-	-	-
AMMONIA, ANHYDROUS	B	D	A	A	B	-	-	-	D	A	-	B	-	B/70	D	-	A/70	-	A	D
AMMONIA, GAS (COLD)	A	A	D	A	-	-	-	-	-	-	-	-	-	-	A	-	B	-	A	D
AMMONIA, GAS (HOT)	C	D	C	A	-	-	-	-	-	-	-	-	-	-	A	-	-	-	-	-
AMMONIA, LIQUIDS	B	D	A	A	D	-	-	-	A	A	-	B	A	B/70	D	A/250	A/70	-	B	A
AMMONIA, WATER	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A/250	-	-	-	-
AMMONIA NITRATE	A	-	-	-	C	D	-	A	A	A	-	-	-	D	C	-	A	-	-	A
AMMONIUM BIFLUORIDE	A	A	-	A	D	D	A	D	D	A	-	-	-	-	D	A/250	A/70	-	-	A

Ratings: A: Minor effect; B: Minor to moderate effect; C: Moderate to severe effect; D: Not recommended; —: Insufficient information.

Viton® is a registered trademark of DuPont Dow Elastomers. Teflon® is a registered trademark of DuPont.
Rulon® is a registered trademark of Saint Gobain Performance Plastics

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AMMONIUM CARBONATE	D	B	A	A	C	D	A	B	C	A	A	B	-	A	D	A/250	A	-	-	A
AMMONIUM CASENITE	-	-	-	-	-	-	-	-	-	A	-	-	-	-	A	-	-	-	-	-
AMMONIUM CHLORIDE	A	A	A	A	C	D	A	D	D	C	A	B	A	C	B	A/250	A	-	-	A
AMMONIUM FLUORIDE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A/250	-	-	-	-
AMMONIUM HYDROXIDE	B	B	A	A	C	D	A	D	A	A	A	B	-	A	C	A/250	A	A	A	A
AMMONIUM NITRATE	A	B	A	A	B	D	A	B	A	A	A	B	-	B	A	A/212	A	-	-	A
AMMONIUM NITRITE	A	-	A	A	-	-	-	-	-	-	-	-	-	-	-	A/212	A/70	-	-	A
AMMONIUM OXALATE	A	-	-	-	-	D	-	D	D	A	-	-	-	-	B	-	-	-	-	-
AMMONIUM PERSULFATE	D	A	B	A	C	D	A	D	D	A	A	-	-	D	D	-	A	-	-	A
AMMONIUM PHOSPHATE, DIBASIC	A	A	A	A	B	D	A	D	D	A	-	-	-	D	B	A/250	A	-	-	A
AMMONIUM PHOSPHATE, MONOBASIC	A	A	A	A	B	D	-	D	D	A	-	-	-	B	B	A/250	A	-	-	A
AMMONIUM PHOSPHATE, TRIBASIC	A	A	A	A	B	C	-	D	D	A	-	-	-	B	B	A/250	A	-	-	A
AMMONIUM SULFATE	A	D	A	A	B	D	A	D	C	A	A	B	-	B/70	B	A/250	A	-	-	A
AMMONIUM THIO-SULFATE	A	-	A	A	-	-	-	D	D	A	-	-	-	-	B	-	-	-	-	-
AMYL-ACETATE	D	D	B	A	B	A	A	C	C	A	A	A	-	C	B	A/250	C/70	-	-	A/120
AMYL-ALCOHOL	B	B	A	A	B	A	A	B	B	A	A	-	-	B/70	A	A/250	B	-	-	A
AMYL-BORATE	A	A	D	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AMYL-CHLORIDE	D	A	D	A	D	A	A	A	A	A	A	-	-	D	A	A/250	D	-	-	A
AMYL-CHLORONAPTHALENE	B	A	D	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
AMYL-NAPTHALENE	D	A	D	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANILINE	D	D	-	A	C	C	A	C	C	A	A	A	-	C	A	A/250	B	A	-	C/70
ANILINE DYES	C	A	A	A	B	-	-	-	A	B	-	-	-	-	-	-	-	-	-	-
ANILINE HYDROCHLORIDE	C	B	B	A	D	D	D	D	D	D	-	-	-	D	-	A/140	-	-	-	A
ANIMAL FATS	A	A	A	A	A	-	-	-	A	A	-	-	-	-	A	-	-	-	-	-
ANTIMONY TRICHLORIDE	-	-	-	-	-	A	-	-	-	-	B	D	-	-	-	A/212	-	-	-	-
ANSUL ETHER	C	D	C	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ANTI-FREEZE	A	A	-	-	A	A	-	A	A	A	-	-	-	D	D	-	A	-	-	-
AQUA REGIA (80%, HCl, 20% HNO3)	D	C	C	A	D	D	D	D	D	D	-	-	A	D	D	A/212	B	-	C	A/70
AROCHLOR(S)1248	D	A	C	A	A	A	-	B	B	A	-	-	-	B/70	-	A/175	-	-	-	-
AROMATIC HYDROCARBONS	D	A	D	A	A	C	-	A	A	A	-	-	-	A	A	-	D	-	A	-
ARSENIC ACID	A	A	A	A	D	B	A	D	D	A	-	-	-	C	D	A/250	A	-	-	A
ARSENIC TRICHLORIDE	C	D	D	A	D	-	-	-	D	D	-	-	-	-	D	-	-	-	-	-
ASKAREL	B	A	D	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ASPHALT	B	A	D	A	C	A	A	A	A	A	-	B	-	A	B	-	A	-	-	A
BARIUM CARBONATE	A	A	A	A	B	B	A	A	A	A	A	B	A	B/70	A	A/250	A	-	-	A
BARIUM CHLORIDE	A	A	A	A	D	B	A	C	C	C	A	C	-	B/120	A	A/250	A	-	-	A
BARIUM CYANIDE	C	A	-	-	C	C	-	C	C	A	-	-	-	-	B	-	-	-	-	-
BARIUM HYDROXIDE	A	A	A	A	D	D	A	D	D	A	A	B	-	B/70	D	A/250	A	-	-	A
BARIUM NITRATE	A	A	-	-	B	D	A	A	A	A	-	-	-	B/70	B	-	-	-	-	-
BARIUM SULFATE	A	A	A	A	D	C	A	B	B	A	A	B	-	B/70	B	A/250	A	-	-	A
BARIUM SULFIDE	A	A	A	A	D	D	A	D	D	A	A	B	-	B/70	A	A/250	A	-	-	A
BEER	A	A	A	A	A	A	A	D	D	A	-	A	-	B/70	A	-	B/70	-	-	A/175
BEET SUGAR LIQUIDS	A	A	A	A	A	C	A	A	A	A	-	-	-	A	B	-	A	-	-	A
BEET SUGAR LIQUORS	A	A	A	A	A	-	-	-	B	A	-	A	-	-	A	-	-	-	-	-
BENZALDEHYDE	D	D	B	A	B	A	A	A	A	A	A	A	-	C	A	A/212	D	-	-	A/70
BENZENE	D	A	D	A	B	A	A	A	A	A	A	A	-	A	A	A/212	B/72	A	A	A/70

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BENZENESULFONIC ACID	C	A	C	A	D	-	A	-	D	B	A	-	-	D	C	A/250	-	-	-	A/70
BENZYL BENZOATE	D	A	B	A	A	-	-	-	B	B	-	-	-	-	-	-	-	-	-	-
BENZYL CHLORIDE	D	C	D	A	D	D	A	-	D	B	-	-	-	A	A	A/250	D	-	-	C
BENZOIC ACID	D	A	B	A	B	B	A	D	D	A	A	B	-	D	B	A/250	B	-	A	A
BENZOL	D	D	D	A	B	A	A	A	B	A	A	-	-	D	A	-	D	-	-	A/70
BENZOL, ALCOHOL	-	-	-	-	-	-	-	-	-	-	-	A	-	-	-	A/250	-	-	-	-
BLAST FURNACE GAS	C	A	B	A	-	-	-	-	-	-	-	-	-	-	D	-	-	-	-	-
BLEACH SOLUTIONS	D	A	A	A	D	-	-	-	-	-	-	-	-	-	D	A/250	B	-	-	-
BORAX (SODIUM BORATE)	B	A	A	A	C	B	A	A	A	A	-	-	-	A	B	A/250	A	-	-	A
BORDEAUX MIXTURE	A	A	A	A	D	-	-	-	C	A	-	-	-	-	-	-	-	-	-	-
BORIC ACID	A	A	A	A	B	B	A	D	D	A	A	B	-	B	A	A/250	A	A	A	A
BRINE	A	A	A	A	C	-	-	-	C	-	-	-	-	-	A	-	A	A	-	A
BREWERY SLOP	A	A	-	-	-	A	-	A	A	A	-	-	-	-	-	-	-	-	-	-
BROMINE	D	A	C	A	D	D	-	-	-	D	A	-	-	D	D	-	B/72	-	C	A/150
BROMINE-ANHYDROUS	-	A	C	A	D	-	-	-	D	D	-	-	-	D	-	-	D	A	-	A/150
BROMINE-TRIFLUORIDE	D	D	D	A	D	-	-	-	D	B	-	-	-	-	D	-	D	-	-	-
BROMINE-VAPOR	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A/212	-	-	-	-
BROMINE-WATER	-	A	-	A	D	-	-	-	D	B	-	-	A	-	D	A/212	D	-	-	A
BROMOBENZENE	D	B	D	A	D	-	-	-	B	B	-	-	-	-	-	-	D	-	-	-
BUNKER OIL	A	A	D	A	A	-	-	-	A	A	-	A	-	-	-	-	-	-	-	-
BUTADIENE	A	A	C	A	A	C	A	-	-	A	-	A	-	-	A	A/250	-	-	-	A
BUTANE	A	A	C	A	A	C	A	-	-	A	-	A	-	B/70	A	A/250	B/72	-	-	A/200
BUTTER	A	A	A	A	A	D	-	D	D	A	-	-	-	-	A	-	-	-	-	-
BUTTERMILK	A	A	-	-	A	D	A	D	D	A	-	B	-	B/70	A	-	-	-	-	-
BUTYL ACETYL RICINOLEATE	A	A	D	A	A	-	-	-	A	A	-	-	-	-	A	-	-	-	-	-
BUTYL ACETATE	D	D	B	A	A	A	A	A	A	C	-	A	-	A	A	A/250	D	-	-	A/70
BUTYL ACRYLATE	D	D	D	A	-	-	-	-	-	-	-	-	-	-	A	-	D	-	-	A/70
BUTYL ALCOHOL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A/250	-	-	-	-
BUTYL AMINE	B	D	D	A	A	B	A	-	-	-	-	-	-	A	C	B/175	-	-	-	B/70
BUTYL BENZOATE	-	A	B	A	B	-	-	-	B	B	-	-	-	-	A	-	-	-	-	-
BUTYL CARBITOL	A	A	A	A	-	-	-	-	-	-	-	-	-	-	A	-	-	-	-	-
BUTYL CELLOSOLVE	B	C	A	A	-	-	-	-	-	-	-	-	-	-	A	-	-	-	-	-
BUTYL CHLORIDE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A/250	-	-	-	-
BUTYL ETHER	-	-	-	-	-	-	A	-	-	-	-	-	-	-	-	A/212	-	-	-	-
BUTYL OLEATE	-	A	B	A	-	-	-	-	-	-	-	-	-	-	A	-	-	-	-	-
BUTYL PHTHALATE	-	-	-	-	-	-	A	-	-	-	-	-	-	-	-	A/140	-	-	-	-
BUTYL STEARATE	A	A	B	A	B	-	-	-	B	B	-	-	-	-	A	-	-	-	-	-
BUTYLENE	B	A	D	A	A	D	A	-	-	A	-	A	-	B/70	A	-	D	-	-	A
BUTRALDEHYDE	D	D	B	A	-	-	-	-	-	-	-	A	-	-	-	-	D	-	-	B
BUTYRIC ACID, AQEOUS	D	D	C	A	B	D	A	D	-	A	-	B	-	B/70	C	A/250	A	-	-	A
CAFFIENE CITRATE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A/140	-	-	-	-
CALCIUM BISULFATE	-	-	-	-	-	C	-		-	-	-	-	-	-	-	A/250	-	-	-	-
CALCIUM BISULFIDE	A	A	-	-	C	C	-	-	-	B	-	-	-	A	A	-	A	-	-	A
CALCIUM CARBONATE	A	A	A	A	C	A	A	-	-	A	A	-	-	A	A	A/212	A	-	-	A
CALCIUM CHLORIDE	A	A	A	A	C	A	A	C	C	C	A	B	-	B/70	D	A/250	A	-	-	A
CALCIUM HYDROXIDE	A	A	A	A	C	D	A	A	A	A	A	B	A	A/120	D	A/250	A	-	A	A

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	BUNA-N	VITON®	EPDM	PTFE (TEFLON®)	ALUMINUM	BRONZE	CARBON GRAPHITE	GRAY IRON	DUCTILE IRON	STAINLESS STEEL (316)	995 CERAMIC (AL2O3)	TUNGSTEN CARBIDE	SSIC	NYLON	CARBON-FILLED ACETAL (CFA)	ETFE	POLYPROPYLENE	RULON®	PEEK	PVDF
CALCIUM HYPOCHLORITE	B	A	B	A	C	D	A	D	D	A	A	C	A	C	D	A/250	A	-	-	A
CALCIUM NITRATE	A	A	A	A	B	B	A	B	C	B	A	B	-	D	D	A/250	A	-	-	A
CALCIUM SULFATE	A	A	A	A	B	A	A	A	A	A	A	B	-	D	D	A/250	A	-	-	A
CALCIUM SULFIDE	A	A	A	A	A	-	-	-	B	B	-	-	-	-	-	A/250	A/120	-	-	A
CALGON	A	A	-	-	-	C	-	D	D	A	-	-	-	A	A	-	A	-	-	-
CANE JUICE	A	-		-	B	A	-	A	A	A	-	-	-	A	A	-	B/72	-	-	A
CANE SUGAR LIQUORS	A	A	A	A	A	-	-	-	B	A	-	-	-	-	-	-	A	-	-	-
CARBAMATE	C	A	B	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
CARBITOL	B	A	B	A	B	-	-	-	B	B	-	A	-	-	-	-	C	-	-	A
CARBOLIC ACID (SEE PHENOL)	D	A	C	A	B	B	A	D	D	A	A	B	-	C	D	-	C	-	-	A/70
CARBON BISULFIDE	D	A	D	A	A	B	-	-	-	A	-	-	-	A	A	-	B/72	-	-	A
CARBON DIOXIDE	A	B	A	A	A	A	A	D	D	A	-	A	-	B/70	A	A/250	A	-	-	A
CARBON DISULFIDE	D	A	D	A	C	D	A	A	A	A	-	B	-	B/70	A	A/250	B/72	A	-	A/70
CARBON MONOXIDE	A	A	C	A	A	A	A	A	A	A	-	-	-	A	A	A/250	A	-	-	B
CARBON TETRACHLORIDE	C	A	D	A	D	A	A	D	C	A	A	A	-	D	A	A/250	B/72	-	A	A
CARBONATE WATER	A	A	-	-	A	A	-	D	D	A	-	-	-	A	A	-	A	-	-	A
CARBONIC ACID	B	A	A	A	A	B	A		D	B	A	A	-	B/70	B	A/250	A	-	-	A
CATSUP	A	A	-	-	D	A	-	D	D	A	-	-	-	A	B	-	A	-	-	-
CELLOSOLVE	C	B	A	A	B	-	-	-	B	B	-	A	-	A	A	A/250	A	-	-	A
CELLOSOLVE ACETATE	C	A	A	A	-	-	-	-	-	-	-	A	-	-	A	-	-	-	-	A/120
CELLULUBE	D	A	A	A	-	-	-	-	-	-	-	-	-	-	A	-	-	-	-	-
CLORACETIC ACID	D	D	B	A	D	-	-	-	D	C	-	D	-	D	D	-	B/72	-	-	A
CHLORINATE GLUE	C	A	-	-	D	A	-	D	D	A	-	-	-	-	D	-	-	-	-	-
CHLORINE (DRY)	D	A	C	A	D	B	A	D	D	-	-	D	-	D	D	-	D	-	-	A
CHLORINE (WET)	D	A	D	A	D	B	A	-	B	D	A	-	-	C	D	A/100	D	-	C	A
CHLORINE, ANHYDROUS LIQUID	D	A	-	A	D	D	A	D	D	D	-	-	-	C	D	-	D	-	-	A
CHLORINE DIOXIDE	D	A	C	A	D	-	-	-	D	D	-	-	-	-	-	A/250	-	-	-	A
CHLORINE GAS (DRY)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A/250	-	-	A	-
CHLORINE GAS (WET)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A/250	-	-	-	-
CHLORINE TRIFLUORIDE	D	C	D	A	D	-	-	-	D	A	-	-	-	-	-	-	-	-	-	-
CHLOROACETIC ACID	-	-	-	-	-	C	A	D	-	-	-	-	-	-	-	A/212	-	A	A	-
CHLOROACETONE	D	B	D	A	D	-	-	-	B	B	-	-	-	-	B	-	D	-	-	-
CHLOROBENZENE (MONO)	D	A	D	A	D	C	A	B	B	A	A	A	-	B/70	B	A/250	D	A	A	A/150
CHLOROBROMOMETHANE	D	A	B	A	D	-	-	B	B	B	A	-	-	-	B	-	D	-	-	-
CHLOROBUTADIENE	D	A	D	A	D	-	-	-	B	A	-	-	-	-	-	-	D	-	-	-
CHLORODODECANE	D	A	D	A	D	-	-	-	-	-	-	-	-	-	-	-	D	-	-	-
CHLOROFORM	D	A	D	A	D	B	A	B	D	A	A	A	A	D	A	A/212	D	A	A	A
1-CHLORONAPTHALENE	D	A	D	A	D	-	-	-	B	B	-	-	-	-	-	-	D	-	-	-
1-CHLORO 1-NITRO ETHANE	D	C	D	A	D	-	-	-	-	-	-	-	-	-	-	-	D	-	-	-
CHLOROSULFONIC ACID	D	D	D	A	D	D	A	D	D	D	A	D	-	D	D	-	D	-	-	D
CHLOROTOLUENE	D	A	D	A	D	-	-	-	B	B	-	-	-	-	A	-	D	-	-	-
CLOROX® (BLEACH)	C	A	-	A	D	-	-	-	D	A	-	-	-	A	D	-	B	-	-	-
CHOCOLATE SYRUP	A	A	-	-	A	-	-	D	D	A	-	-	-	A	A	-	A	-	-	-
CHROMIC ACID 5%	D	A	A	A	C	B	A	D	D	A	A	D	A	D	D	B/250	A/70	B	-	A/120
CHROMIC ACID 50%	D	A	C	A	C	D	A	D	D	B	A	-	A	C	D	B/250	A/70	-	-	A/120
CHROMIUM ALUM	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	B/250	-	-	-	-

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CHROME PLATING SOLUTIONS	D	A	D	A	D	-	-	-	D	D	-	-	-	-	D	-	B	-	-	A
CIDER	A	A	-	-	B	A	-	D	D	A	A	-	-	-	A	-	-	-	-	-
CITRIC ACID	A	A	A	A	C	D	A	D	D	A	A	C	-	B/70	C	A/140	A	A	-	A
CITRIC OILS	A	A	B	A	C	A	-	D	D	A	-	-	-	-	B	-	A	-	-	-
COBALT CHLORIDE (2N)	A	A	C	A	D	-	-	-	D	-	-	-	-	-	-	-	A	-	-	-
COFFEE	A	A	-	-	A	A	-	-	-	A	-	-	-	A	A	-	A	-	-	-
COKE OVEN GAS	C	A	D	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
COPPER ACETATE	B	-	A	A	D	-	-	-	D	C	-	-	-	-	A	-	-	-	-	-
COPPER CHLORIDE	A	A	A	A	D	D	-	-	D	D	A	-	A	A	A	A/250	A	-	-	A
COPPER CYANIDE	A	A	A	A	D	D	A	A	D	A	A	-	A	B/70	A	A/250	A	-	-	A
COPPER FLUOBORATE	B	A	-	-	D	-	-	D	D	D	-	-	-	-	B	-	-	-	-	-
COPPER FLUORIDE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A/250	-	-	-	-
COPPER NITRATE	A	A	A	A	D	D	A	D	D	A	A	D	-	D	A	A/250	A	-	-	A
COPPER SULFATE (5% SOLUTION)	A	A	A	A	D	B	A	D	D	A	A	C	A	C	D	A/250	A	-	-	A
CREAM	A	A	-	-	A	A	-	D	D	A	-	-	-	A	A	-	A	-	-	-
CRESOLS	D	A	D	A	B	A	A	C	C	A	-	-	-	D	B	A/250	D	-	-	A/150
CRESYLIC ACID	D	A	D	A	C	D	A	A	A	A	-	C	-	D	D	-	C	-	-	A/150
CRUDE OIL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A/250	-	-	-	-
CYCLOHEXANE	A	A	D	A	A	-	-	B	B	A	-	A	-	A	A	A/250	D	-	A	A
CYCLOHEXANOL	B	A	C	A	C	-	-	-	B	B	-	-	-	B	A	A/250	B	-	-	A/150
CYCLOHEXANONE	D	D	C	A	B	-	-	B	B	B	-	-	-	A	A	A/250	D	-	A	B/70
CYANIC ACID	C	-	-	-	-	-	A	D	D	A	-	-	-	-	D	-	-	-	-	-
DECALIN (DEKLIN)	D	A	D	A	-	-	-	-	-	-	-	-	-	-	-	-	B/120	-	-	A/175
DECANE	B	A	C	A	-	-	-	-	-	-	-	-	-	-	-	A/250	A/70	-	-	-
DENATURED ALCOHOL	A	B	A	A	A	-	-	-	A	A	-	-	-	-	A	-	A	-	-	A
DETERGENTS	A	A	A	A	A	B	A	-	-	A	A	-	-	A	A	A/250	A	-	-	-
DEVELOPING FLUIDS	A	A	A	A	-	-	-	-	-	B	-	-	-	-	A	-	-	-	-	-
DIACETONE	D	D	A	A	A	B	A	-	A	A	-	-	-	A	-	A/212	D	-	-	A/70
DIBENZYL ETHER	D	C	C	A	B	-	-	-	B	B	-	-	-	-	-	-	-	-	-	-
DIBENZYL SEBECATE	D	B	B	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DIBUTYL AMINE	C	B	D	A	-	-	-	-	-	-	-	-	-	-	-	-	D	-	-	-
DIBUTYL ETHER	B	C	C	A	B	-	-	-	B	B	-	-	-	-	-	A/212	D	-	-	A/20
DIBUTYL PHTHALATE	D	B	A	A	A	-	-	-	A	A	-	A	-	A	-	A/140	C	-	-	D
DIBUTYL SEBECATE	D	B	B	A	-	-	-	-	A	A	-	-	-	-	-	-	B/72	-	-	D
DICHLOROBENZYENE	-	-	-	-	-	B	A	-	-	-	-	-	-	-	-	A/140	-	-	-	-
DICHLOROETHYLENE	-	-	-	-	-	D	A	-	-	-	A	-	-	-	-	A/175	-	-	-	-
O-DICHLOROBENZENE	D	A	D	A	D	-	-	-	B	B		-	-	-	-	-	B/70	-	-	A/150
DICHLORO-ISOPROPYL ETHER	D	C	C	A	D	-	-	-	-	-	-	-	-	-	-	-	D	-	-	-
DICYCLOHEXYLAMINE	D	B	D	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DIESEL FUEL	A	A	D	A	A	A	A	A	A	A	-	-	-	A	A	A/250	B/70	-	-	A
DIETHYL BENZENE	D	A	D	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DIETHYL ETHER	B	D	D	A	B	A	A	-	B	B	-	-	-	C	-	A/212	-	A	-	A/70
DIETHYL SEBECATE	D	A	B	A	A	-	-	-	A	A	-	-	-	-	-	-	A/120	-	-	A/120
DIETHYLAMINE	B	D	-	-	A	A	A	B	B	A	-	-	-	B/70	B	A/212	C	-	A	A/70
DIETHYLENE GLYCOL	A	A	A	A	B	-	A	A	A	A	-	A	-	B/70	D	-	-	-	-	A
DIISOBUTYLENE	B	A	-	A	B	-	-	-	B	B	-	-	-	-	A	A/250	-	-	-	A

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	BUNA-N	VITON®	EPDM	PTFE (TEFLON®)	ALUMINUM	BRONZE	CARBON GRAPHITE	GRAY IRON	DUCTILE IRON	STAINLESS STEEL (316)	995 CERAMIC (AL2O3)	TUNGSTEN CARBIDE	SSIC	NYLON	CARBON-FILLED ACETAL (CFA)	ETFE	POLYPROPYLENE	RULON®	PEEK	PVDF
DIISOPROPYL BENZENE	D	A	D	A	-	-	-	-	-	-	-	-	-	-	A	-	-	-	-	-
DIISOPROPYL KETONE	D	D	A	A	-	-	-	-	-	-	-	-	-	-	A	-	-	-	-	-
DIMETHYL ANILINE	D	C	B	A	A	-	A	-	-	-	-	-	-	A	D	A/250	A	-	-	A/70
DIMETHYL FORMAMIDE	C	A	-	A	A	-	-	-	A	A	-	A	-	A	C	B/250	A/120	-	-	D
DIMETHYL PHTHALATE	D	C	B	A	-	-	-	-	-	B	-	A	-	C	-	A/250	A/70	-	-	A/70
DINITROTOLUENE	D	B	D	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
DIOCTYL PHTHALATE	D	A	B	A	A	-	-	-	A	A	-	-	-	A	B	A/250	-	-	-	-
DIOCTYL SEBECATE	D	B	B	A	-	-	-	-	-	-	-	-	-	-	B	-	-	-	-	-
DIOXANE	D	D	A	A	B	-	-	-	A	A	-	A	-	A	B	A/212	C/120	-	A	C/120
DIOXOLANE	D	B	C	A	-	-	-	-	-	-	-	-	-	-	B	-	-	-	-	-
DIPENTENE	C	A	D	A	A	-	-	-	A	A	-	A	-	-	-	-	-	-	-	-
DIPHENYL	D	A	D	A	A	B	-	-	B	B	-	-	-	-	-	A/250	-	-	-	A/120
DIPHENYL OXIDE	D	A	D	A	B	-	-	A	A	A	-	-	-	-	D	A/250	-	-	-	B
DISODIUM PHOSPHATE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A/250	-	-	-	-
DOWTHERM OIL	-	A	D	A	C	-	-	-	B	A	-	A	-	A	-	-	-	-	-	-
DRY CLEANING FLUIDS	C	A	D	A	A	-	-	-	A	A	-	-	-	-	-	-	D	-	-	-
DYES	-	A	-	-	B	-	-	-	-	A	-	-	-	A	C	-	-	-	-	-
EPICHLOROHYDRINE	D	D	B	A	D	-	-	-	A	A	-	-	-	A	B	-	B/70	-	-	D
EPSOM SALTS (MAGNESIUM SULFATE)	A	A	A	A	A	A	A	A	A	A	-	-	-	B/70	B	A/250	A	-	-	A
ETHANE	A	A	D	A	A	-	A	-	-	A	-	A	-	D	A	-	-	-	-	A
ETHANOLAMINE	B	D	B	A	B	B	A	-	-	A	A	-	-	A	D	A/212	D	-	-	C
ETHER	D	C	D	A	A	A	A	C	C	A	-	A	-	A	A	A/212	C	-	A	A/70
ETHYL ACETATE	D	D	B	A	B	A	A	A	A	A	A	A	-	B/120	A	B/175	B/72	-	A	D
ETHYL ACETOACETATE	D	D	B	A	A	-	-	-	A	-	-	-	-	-	A	-	-	-	-	A/70
ETHYL ACRYLATE	D	D	B	A	A	-	-	-	A	A	-	A	-	-	A	-	D	-	-	C
EHTYL ALCOHOL (ETHANOL)	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	A/250	-	-	-	-
ETHYL BENZENE	D	A	D	A	A	-	-	-	B	B	-	A	-	-	A	A/140	D	-	-	C
ETHYL BENZOATE	D	A	B	A	A	-	-	-	A	A	-	-	-	-	A	-	-	-	-	D
ETHYL CELLOSOLVE	C	B	A	A	-	-	-	-	-	-	-	-	-	-	A	-	-	-	-	-
ETHYL CELLULOSE	B	A	B	A	B	-	-	-	A	B	-	-	-	-	A	-	-	-	-	-
ETHYL CHLORIDE	A	A	C	A	D	A	A	C	C	A	A	C	-	B/70	A	A/250	D	-	-	A
ETHYL CHLOROCARBONATE	-	A	-	A	D	-	-	-	A	-	-	-	-	-	A	-	-	-	-	-
ETHYL CHLOROFORMATE	-	A	-	A	D	-	-	-	-	-	-	-	-	-	A	-	D	-	-	-
ETHYL ETHER	B	D	D	A	C	A	A	C	B	A	-	B	-	B/70	A	A/212	C	-	-	A
ETHYL FORMATE	D	C	B	A	C	-	-	-	A	B	-	-	-	-	A	-	-	-	-	-
ETHYL MERCAPTAN	D	B	D	A	B	-	-	-	A	B	-	B	-	-	-	-	-	-	-	-
ETHYL OXALATE	D	B	A	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ETHYL PENTOCHLOROBENZENE	D	A	D	A	D	-	-	-	-	-	-	-	-	-	-	-	D	-	-	-
ETHYL SILICATE	A	A	A	A	B	-	-	-	A	A	-	-	-	-	-	-	-	-	-	-
ETHYL SULFATE	A	A	-	A	-	D	A	-	-	D	-	-	-	-	-	-	-	-	-	-
ETHYLENE	B	A	C	A	A	-	-	-	A	A	-	A	-	-	A	-	-	-	-	-
ETHYLENE BROMIDE	-	-	-	-	-	B	A	-	-	-	-	-	-	-	-	A/250	-	-	-	-
ETHYLENE CHLORIDE	D	A	C	A	D	A	A	-	C	A	-	-	-	B/70	A	A/250	B/72	-	-	A
ETHYLENE CHLOROHYDRIN	D	B	A	A	D	B	A	-	B	B	-	B	-	D	B	A/250	D	-	-	A/70
ETHYLENE DIAMINE	B	D	A	A	D	B	-	-	A	A	-	A	-	B/70	A	A/140	A	-	-	D
ETHYLENE DICHLORIDE	D	A	B	A	D	C	A	A	A	A	A	B	-	B/70	A	A/212	D	-	-	A

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CHEMICALS	ELASTOMERS				METALS									PLASTICS						
	BUNA-N	VITON®	EPDM	PTFE (TEFLON®)	ALUMINUM	BRONZE	CARBON GRAPHITE	GRAY IRON	DUCTILE IRON	STAINLESS STEEL (316)	995 CERAMIC (AL2O3)	TUNGSTEN CARBIDE	SSiC	NYLON	CARBON-FILLED ACETAL (CFA)	ETFE	POLYPROPYLENE	RULON®	PEEK	PVDF
ETHYLENE GLYCOL	A	A	A	A	A	A	A	A	B	A	A	A	A	B/70	D	A/250	A/120	A	A	A
ETHYLENE OXIDE	D	D	D	A	A	C	A	D	D	-	-	A	-	A/70	A	A/212	D	-	-	A
ETHYLENE TRICHOLORIDE	D	A	D	A	D	-	-	-	A	A	-	-	-	-	-	A	D	-	-	A
FATTY ACIDS	C	A	D	A	B	A	A	C	D	A	A	B	-	B/70	B	A/250	B/70	A	-	A
FERRIC CHLORIDE	A	A	A	A	D	D	A	D	D	D	-	D	A	C	D	A/250	A	A	-	A
FERRIC NITRATE	A	A	A	A	D	C	A	-	-	A	-	-	-	C	D	A/250	A	-	-	A
FERRIC SULFATE	B	A	A	A	D	C	A	D	D	A	A	D	A	C	D	A/250	A	A	-	A
FERROUS CHLORIDE	B	A	A	A	D	C	A	D	D	D	-	D	-	D	D	A/250	A	-	-	A
FERROUS SULFATE	B	A	A	A	D	B	A	D	D	A	A	D	-	D	D	A/250	A	-	-	A
FISH OIL	A	A	-	A	-	-	-	-	-	-	-	A	-	-	-	-	-	-	-	-
FLUOBORIC ACID	B	A	A	A	D	B	A	D	D	B	C	-	A	D	A	A/250	A	-	-	A
FLUORINE (LIQUID)	D	B	C	A	D	C	C	D	D	A	-	-	-	D	D	-	D	-	-	A/70
FLUOROBENZENE	D	A	D	A	D	-	-	-	-	-	-	-	-	-	A	-	D	-	-	-
FLUOROCARBON OILS	-	-	A	A	D	-	-	-	-	-	-	-	-	-	-	-	D	-	-	-
FLUOROLUBE	C	B	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FLUORINATE CYCLIC ETHERS	-	-	-	-	D	-	-	-	-	-	-	-	-	-	-	-	D	-	-	-
FLUOSILICIC ACID	A	-	B	A	D	B	A	D	D	B	C	-	-	D	A	-	A	B	-	-
FORMALDEHYDE	C	A	A	A	A	B	-	C	D	A	-	C	A	D	A	A/212	A	-	-	A/120
FORMIC ACID	D	B	B	A	D	C	A	D	D	A	-	C	A	D	D	A/250	A	A	-	A
FREON 11	C	C	D	A	D	-	-	A	C	A	A	-	-	D	A	A/212	D	-	-	A
FREON 12 (WET)	A	A	B	A	D	B	-	A	A	A	-	A	A	D	A	A/212	B/72	A	-	A
FREON 13	A	A	A	A	D	-	-	-	-	-	-	-	-	-	A	-	D	-	-	A
FREON 21	D	D	D	A	D	-	-	-	-	-	-	-	-	-	A	A/212	D	-	-	A
FREON 22	D	D	C	A	D	-	-	D	D	A	-	-	-	B	A	A/212	D	-	-	A
FREON 31	D	D	A	A	D	-	-	-	-	-	-	-	-	-	A	-	-	-	-	-
FREON 32	A	C	A	A	D	-	-	-	-	-	-	-	-	-	A	-	-	-	-	-
FREON 112	B	A	D	A	D	-	-	-	-	-	-	-	-	-	A	-	-	-	-	-
FREON 113	A	C	D	A	D	-	-	-	-	A	A	-	-	-	A	A/212	D	-	-	A
FREON 114	A	A	C	A	D	-	-	-	-	-	-	-	-	-	A	A/212	D	-	-	A
FREON 115	A	B	A	A	D	-	-	-	-	-	-	-	-	-	A	-	-	-	-	-
FREON 142B	A	D	A	A	D	-	-	-	-	-	-	-	-	-	A	-	-	-	-	-
FREON 152A	A	D	A	A	D	-	-	-	-	-	-	-	-	-	A	-	-	-	-	-
FREON 218	A	A	A	A	D	-	-	-	-	-	-	-	-	-	A	-	-	-	-	-
FREON C316	A	A	A	A	D	-	-	-	-	-	-	-	-	-	A	-	-	-	-	-
FREON C318	A	A	A	A	D	-	-	-	-	-	-	-	-	-	A	-	-	-	-	-
FREON 13 B1	A	A	A	A	D	-	-	-	-	-	-	-	-	-	A	-	-	-	-	-
FREON 114B2	B	B	D	A	D	-	-	-	-	-	-	-	-	-	A	-	-	-	-	-
FREON 502	B	B	-	A	D	-	-	-	-	-	-	-	-	-	A	-	-	-	-	-
FREON TF	A	B	D	A	D	-	-	A	A	A	A	-	-	D	A	-	-	-	-	B
FREON T-WD602	B	A	B	A	D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FREON TMC	B	A	B	A	D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FREON T-P35	A	A	A	A	D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FREON TA	A	C	A	A	D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FREON TC	A	A	B	A	D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FREON MF	A	-	-	A	D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FREON BF	B	-	-	A	D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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	BUNA-N	VITON®	EPDM	PTFE (TEFLON®)	ALUMINUM	BRONZE	CARBON GRAPHITE	GRAY IRON	DUCTILE IRON	STAINLESS STEEL (316)	995 CERAMIC (AL2O3)	TUNGSTEN CARBIDE	SSIC	NYLON	CARBON-FILLED ACETAL (CFA)	ETFE	POLYPROPYLENE	RULON®	PEEK	PVDF
FRUIT JUICE	A	A	-	A	B	-	-	D	D	A	A	A	-	A	D	-	A	-	-	A
FUEL OIL	A	A	D	A	A	A	A	A	A	A	-	A	-	B/70	A	A/250	C	-	-	A
FUMARIC ACID	C	A	-	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
FURAN, FURFURAN	D	C	D	A	-	-	-	-	-	-	-	-	-	-	-	A/212	C	-	-	-
FURAN RESIN	D	A	D	A	A	-	-	-	-	A	-	-	-	-	D	-	C	-	-	D
FURFURAL	D	D	A	A	A	B	A	B	B	A	-	B	-	B	A	A/212	D	-	-	B/120
GALLIC ACID	D	A	B	A	A	B	B	D	D	B	-	B	-	B/70	-	A/212	A	-	-	A/70
GASOLINE - LEADED	A	A	D	A	A	A	A	-	A	A	A	A	A	A	A	A/250	D	-	-	A
GASOLINE - UNLEADED	D	A	D	A	A	A	A	A	A	A	-	-	A	A	A	A/250	D	-	-	C
GELATINE	A	A	A	A	A	A	A	A	D	A	-	-	-	B/70	B	-	A	-	-	A
GLUCOSE	A	A	A	A	A	-	A	A	B	A	-	A	-	B/70	A	-	A	-	-	A
GLUE P.V.A.	D	A	B	A	B	A	A	A	A	A	-	-	-	A/70	A	-	B	-	-	A
GLYCERINE	A	A	A	A	A	A	A	A	B	A	A	A	-	A/70	A	A/250	A	-	-	A
GLYCOLIC ACID	A	A	-	-	-	-	A	-	-	-	-	-	-	-	A	A/250	A/70	-	-	A/70
GLYCOLS	A	A	A	A	B	-	-	-	B	B	-	A	-	B/70	D	A/250	A	-	-	A
GOLD MONOCYANIDE	A	A	-	-	-	-	-	D	D	A	-	-	-	-	A	-	-	-	-	-
GRAPE JUICE	A	A	-	-	B	A	-	D	D	A	-	-	-	A	B	-	A	-	-	A
GREASE	A	A	D	A	A	A	-	A	A	A	-	-	-	-	A	-	-	-	-	A
GREEN SULFATE LIQUOR	A	A	A	A	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	-
HALOWAX OIL	D	A	D	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HEPTANE	A	A	-	A	A	A	A	A	A	A	-	A	-	A	A	A/250	C/170	-	A	A
HEXANE	A	A	D	A	A	A	A	A	A	A	-	A	-	B/70	A	A/250	C/170	-	A	A
N-HEXALDEHYDE	D	C	B	A	A	-	-	-	A	A	-	-	-	-	-	-	-	-	-	-
N-HEXENE-1	A	A	D	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
HONEY	A	A	-	-	A	A	-	A	A	A	-	-	-	A/70	A	-	A	-	-	A
HYDRAULIC OILS (PETROLEUM)	A	A	C	A	A	A	B	A	A	A	-	A	-	A/70	A	-	D	-	-	-
HYDRAULIC OILS (SYNTHETIC)	C	A	-	-	A	A	B	-	A	A	-	-	-	A	A	-	D	-	-	-
HYDRAZINE	B	A	A	A	-	-	-	D	C	A	-	-	-	-	B	A/100	A/70	-	-	A/120
HYDROBROMIC ACID	D	A	A	A	D	-	A	D	D	D	-	D	A	D	D	A/250	B	-	C	A
HYDROCHLORIC ACID (20%)	C	A	A	A	D	D	A	D	D	D	C	-	-	D	D	A/250	A	A	A	A
HYDROCHLORIC ACID (37%) (HOT)	D	A	C	A	D	D	A	D	D	D	C	D	-	D	D	A/250	-	-	-	A
HYDROCHLORIC ACID (37%) (COLD)	C	A	B	A	D	-	-	-	D	D	-	-	-	D	D	A/250	A	-	-	A
HYDROCYANIC ACID	C	A	B	A	A	A	A	D	D	A	-	D	-	-	D	A/250	A	-	-	A
HYDROFLUORIC ACID (20%)*	D	A	-	A	D	B	A	D	D	D	-	D	A	D	D	A/250	A*	B	-	A
HYDROFLUORIC ACID (50%)*	D	A	A	A	D	B	A	D	D	D	-	-	A	D	D	A/250	B/72*	-	-	A
HYDROFLUORIC ACID (75%)*	D	A	C	A	D	B	A	D	D	D	C	-	A	D	D	A/250	B/72*	-	-	A
HYDROFLUORIC ACID (CONC-) (HOT)	D	B	-	A	D	-	-	-	D	D	-	-	-	D	D	A/212	D	-	-	A
HYDROFLUORIC ACID (CONC-) (COLD)	D	A	-	A	D	-	-	-	D	D	-	-	-	D	D	A/250	D	-	-	A
HYDROFLUOSILICIC ACID (20%)	B	A	B	A	D	B	A	B	D	D	-	-	-	D	-	-	A	-	-	A
HYDROGEN FLUORIDE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A/250	-	-	-	-
HYDROGEN GAS	A	A	B	A	A	A	A	-	A	A	-	-	-	B/120	-	A/250	A	-	-	A
HYDROGEN PEROXIDE	B	A	C	A	A	-	-	-	D	A	-	-	A	D	D	-	A/70	-	-	A/70
HYDROGEN PEROXIDE (5%)	-	-	-	-	-	B	C	C	-	-	-	D	A	-	-	A/250	-	-	A	-
HYDROGEN PEROXIDE (50%)	-	-	-	-	-	B	C	-	-	-	-	D	A	-	-	A/140	-	-	A	-
HYDROGEN PEROXIDE (90%)	-	-	-	-	-	-	-	-	-	-	-	-	A	-	-	A/140	-	-	A	-
HYDROGEN SULFIDE (WET) (COLD)	C	A	A	A	D	A	A	D	D	A	A	D	-	C	D	A/250	A	-	-	A

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HYDROGEN SULFIDE (WET) (HOT)	D	B	A	A	D	-	-	-	D	A	-	-	-	D	D	A/250	A	-	-	A
HYDROGEN SULFIDE AQUEOUS SOLUTION	C	D	A	A	D	-	-	-	D	A	-	D	-	-	C	-	A	A	-	A
HYDROQUINONE	C	C	-	A	A	-	A	-	B	B	-	-	-	-	A	-	A	-	-	A
HYDROXYACETIC ACID (70%)	A	A	-	A	D	-	-	B	B	-	-	-	-	-	C	-	-	-	-	-
HYPOCHLOROUS ACID	D	A	B	A	D	-	-	-	D	D	-	-	-	-	D	A/250	A	-	-	A
INK	A	A	-	-	C	-	-	D	D	A	A	A	-	C	A	-	-	-	-	A
IODINE (IN ALCOHOL)	B	A	D	A	D	B	-	-	D	D	-	-	-	C	A	A/250	A/70	-	-	A/150
IODINE PENTAFLUORIDE	D	D	D	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
IODOFORM	D	-	A	A	B	-	-	-	A	B	-	-	-	-	-	-	-	-	-	A
ISOBUTYL ALCOHOL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A/250	-	-	-	-
ISOOCTANE	A	A	D	A	A	A	A	-	-	-	-	A	-	B/70	-	A/140	A	-	A	-
ISOTANE	A	A	-	-	A	-	-	-	-	-	-	-	-	D	-	-	B/72	-	-	A
ISOPHORONE	D	D	C	A	A	-	-	-	B	A	-	A	-	-	-	-	-	-	-	-
ISOPROPYL ACETATE	D	D	B	A	C	A	A	-	-	B	-	A	-	B/70	A	A/140	-	-	-	-
ISOPROPYL CHLORIDE	D	B	D	A	D	-	-	-	A	A	-	-	-	-	A	-	D	-	-	-
ISOPROPYL ETHER	B	D	D	A	A	A	A	-	-	A	-	A	-	A/70	A	-	B/72	-	-	-
JET FUEL (JP3, JP4, JP5)	A	A	D	A	A	A	A	A	A	A	-	A	-	A/70	A	A/212	D	-	-	A
KEROSENE	A	A	D	A	A	A	A	A	A	A	A	A	A	A	A	A/250	B/72	-	-	A
KETONES	D	D	B	A	B	A	A	-	-	A	A	A	-	A/120	A	A/212	D	-	A	A/70
LACQUERS	D	D	D	A	A	A	A	C	C	A	-	A	-	A/70	A	-	C	-	-	D
LACQUER SOLVENTS	D	D	D	A	A	A	A	C	B	A	-	-	-	A/70	A	-	C	-	-	D
LACTIC ACID	B	A	B	A	C	-	-	-	D	A	-	C	-	C	A	A/250	A	-	-	A/70
LARD	A	A	C	A	A	A	A	A	A	A	-	A	-	A/70	A	A/250	A	-	-	A
LATEX - WATER BASE	A	A	-	A	A	-	-	-	-	A	-	-	-	A/70	A	-	A	-	-	-
LAVENDER OIL	B	B	C	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LEAD ACETATE	B	D	A	A	D	B	A	A	A	B	A	-	-	B/70	B	A/250	A	A	-	A
LEAD NITRATE	-	-	-	-	-	B	A	-	-	-	-	-	-	-	-	A/140	-	-	-	-
LEAD SULFAMATE	B	A	A	A	C	-	-	-	-	-	-	-	-	B/70	A	-	A	-	-	A
LIGROIN	A	A	D	A	D	-	-	-	-	A	-	A	-	D	B	-	B/175	-	-	A
LIME	A	A	A	A	C	-	A	A	A	A	-	-	-	B/70	B	A/250	-	-	-	A
LIME BLEACH	A	A	A	A	D	-	-	-	-	A	-	-	-	-	-	-	B	-	-	-
LIME SULFUR	D	A	C	A	-	-	-	-	-	A	-	-	-	B/70	-	A/250	A	-	-	-
LINDOL	D	B	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
LINOLEIC ACID	B	A	D	A	A	-	A	-	D	A	-	C	-	-	-	A/250	A/70	-	-	A
LIQUEFIED PETROLEUM GAS	A	A	D	A	-	-	-	-	-	-	-	A	-	-	A	-	D	-	-	-
LUBRICANTS	A	A	D	A	A	A	A	A	A	A	-	-	-	A/70	A	-	B	-	-	A
LUBRICATING OILS (PETROLEUM)	A	A	D	A	A	-	-	-	A	A	-	-	-	A/70	A	A/250	B	-	-	A
LYE	C	B	B	A	-	D	A	A	-	A	A	-	-	A/70	-	-	A	-	-	A/150
MAGNESIUM CARBONATE	A	-	C	A	D	A	-	-	-	A	A	-	-	-	A	A/250	A	-	-	A
MAGNESIUM CHLORIDE	A	A	A	A	D	B	A	D	D	D	A	B	-	A/70	A	A/250	A	-	-	A
MAGNESIUM HYDROXIDE	B	A	A	A	D	B	A	A	B	A	A	B	-	B/70	A	A/250	A	-	-	A
MAGNESIUM NITRATE	A	-	A	A	D	A	-	D	D	A	A	B	-	A/70	A	A/250	A	-	-	A
MAGNESIUM OXIDE	A	-	-	A	B	-	-	A	A	A	-	-	-	-	A	-	-	-	-	-
MAGNESIUM SULFATE	A	A	A	A	D	A	A	A	C	A	-	B	-	A/70	A	A/250	B	-	-	A
MALEIC ACID	D	A	C	A	B	B	A	A	A	A	-	C	-	B/70	A	-	A	A	-	A
MALEIC ANHYDRIDE	D	A	C	A	A	-	-	-	-	-	-	-	-	-	A	-	-	-	-	A

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CHEMICALS	ELASTOMERS				METALS									PLASTICS						
	BUNA-N	VITON®	EPDM	PTFE (TEFLON®)	ALUMINUM	BRONZE	CARBON GRAPHITE	GRAY IRON	DUCTILE IRON	STAINLESS STEEL (316)	995 CERAMIC (AL2O3)	TUNGSTEN CARBIDE	SSIC	NYLON	CARBON-FILLED ACETAL (CFA)	ETFE	POLYPROPYLENE	RULON®	PEEK	PVDF
MALIC ACID	B	A	D	A	B	B	B	-	D	A	-	-	-	C/70	A	A/250	B	-	-	A
MASH	A	-	-	-	A	-	-	-	-	A	-	-	-	A	A	-	-	-	-	-
MAYONNAISE	A	A	-	-	D	-	-	D	D	A	-	-	-	A	A	-	A	-	-	A
MELAMINE	C	-	-	-	-	-	D	D	D	D	-	-	-	A	A	-	-	-	-	-
MERCURIC CHLORIDE (DILUTE SOLUTION)	A	A	A	A	D	D	C	D	D	D	A	D	-	D	B	A/250	A	-	-	A
MERCURIC CYANIDE	A	-	A	A	D	D	-	C	C	A	A	-	-	A	-	A/250	A	-	-	A
MERCUROUS NITRATE	-	-	-	-	-	-	C	-	-	-	A	-	-	-	-	A/250	-	-	-	-
MERCURY	A	A	A	A	C	A	C	A	A	A	A	-	-	A/120	A	A/250	A	-	-	A
MESITYL OXIDE	D	D	B	A	A	-	-	-	A	A	-	-	-	-	-	-	-	-	-	-
METHANE	A	A	D	A	A	A	B	-	-	A	-	A	-	A/120	A	A/250	B	-	-	A
METHANOL (SEE ALCOHOL METHYL)	A	C	B	A	B	A	A	A	A	A	A	-	-	B/70	A	A/250	A/120	-	-	A
METHYL ACETATE	D	D	A	A	A	A	A	A	A	A	-	B	-	A/120	A	-	C	-	-	B
METHYL ACRYLATE	D	D	B	A	-	-	-	A	A	-	-	A	-	-	A	-	-	-	-	B
METHYL ACETONE	D	-	-	A	A	A	A	A	A	A	-	-	-	A	A	-	D	-	-	D
METHYL BROMIDE	B	A	A	A	D	-	A	A	A	-	-	-	-	C	A	A/250	D	-	-	A
METHYL BUTYL KETONE	D	D	B	A	A	-	-	-	-	A	-	-	-	D	A	-	D	-	-	D
METHYL CELLOSOLVE	D	D	B	A	A	A	A	C	C	-	-	A	-	C	A	A/250	B	-	-	A
METHYL CHLORIDE	D	A	C	A	D	B	A	D	D	A	-	-	-	C	A	A/250	D	-	-	A
METHYL CYCLOPENTANE	B	A	D	A	-	-	-	-	-	-	-	-	-	-	A	-	-	-	-	-
METHYL DICHLORIDE	D	A	-	-	D	-	-	-	-	-	-	-	-	C	A	-	D	-	-	D
METHYL ETHYL KETONE	D	D	A	A	A	A	A	A	A	A	A	-	-	A/70	A	A/250	C	-	A	D
METHYL FORMATE	D	D	A	A	A	-	-	-	B	B	-	-	-	-	A	-	-	-	-	-
METHYL ISOBUTYL KETONE	D	D	B	A	B	A	A	C	C	A	-	-	-	A/70	A	-	B/72	-	-	D
METHYL ISOPROPYL KETONE	D	D	C	A	A	A	A	C	C	A	-	-	-	D	A	A/250	C	-	-	-
METHYL METHACRYLATE	D	D	C	A	-	-	N/A	C	C	-	-	A	-	-	A	-	A	-	-	B
METHYL OLEATE	D	B	C	A	-	-	A	-	-	-	-	-	-	-	A	-	-	-	-	-
METHYL SALICYLATE	D	B	C	A	A	-	-	-	A	-	-	A	-	-	A	-	B	-	-	B
METHYLACRYLIC ACID	-	B	B	A	-	-	-	-	-	-	-	-	-	-	A	-	-	-	-	-
METHYLAMINE	B	-	A	A	-	A	-	A	A	A	-	-	-	-	A	-	-	-	-	C
METHYLENE CHLORIDE	D	B	C	A	D	B	A	B	B	A	-	B	-	-	A	A/212	D	-	A	D
MILK	A	A	A	A	A	A	A	D	D	A	A	A	-	A/120	A	-	A	-	-	A
MOLASSES	A	A	A	A	A	A	A	B	A	A	A	A	-	A/70	A	-	A	A	-	A
MONOBROMOROBENZENE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A/212	-	-	-	-
MONOCHLOROACETIC ACID	-	-	-	-	-	B	B	D	-	-	-	-	-	-	-	A/212	-	-	-	-
MONOCHLOROBENZENE	D	A	D	A	D	-	-	-	A	A	-	A	-	B/70	A	A/250	D	-	-	A/150
MONOMETHYL ANILINE	D	C	D	A	-	-	-	-	-	-	-	-	-	-	B	-	C	-	-	-
MONOETHANOLAMINE	B	C	B	A	B	A	A	A	A	A	-	A	-	A	D	A/140	D	-	-	D
MONOMETHYLETHER	A	A	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MONOVINYL ACETYLENE	A	A	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
MUSTARD	B	A	-	-	B	A	A	D	C	A	-	-	-	A/70	B	-	A	-	-	A
NAPTHA	B	A	D	A	A	A	A	B	B	A	-	A	-	A/70	A	A/250	C	A	-	A
NAPTHALENE	D	A	D	A	B	A	A	A	B	B	A	-	-	A/70	A	A/250	A/70	A	-	A
NAPTHENIC ACID	B	A	D	A	B	-	-	-	B	A	-	-	-	-	A	-	-	-	-	-
NATURAL GAS	A	A	C	A	A	A	-	A	A	A	-	-	-	-	A	A/250	A	-	-	-
NEATSFOOT OIL	A	A	B	A	A	-	-	-	A	A	-	A	-	-	B	-	-	-	-	-
NEVILLE ACID	C	A	B	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

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NICKEL ACETATE	B	A	A	A	D	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NICKEL CHLORIDE	A	A	A	A	D	B	A	D	D	A	A	D	A	C	A	A/250	A	-	-	A
NICKEL NITRATE	-	-	-	-	-	A	-	C	-	-	A	-	-	-	-	A/250	-	-	-	-
NICKEL SULFATE	A	A	A	A	D	B	A	D	D	A	A	D	A	A/70	A	A/250	A	-	-	A
NITER CAKE	A	A	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
NITRIC ACID (5-10% SOLUTION)	D	A	B	A	D	A	A	D	D	A	A	D	-	C	C	B/212	A/120	-	-	A/120
NITRIC ACID (20% SOLUTION)	D	A	B	A	D	A	A	D	D	A	A	D	-	D	C	B/212	B/70	-	A	A
NITRIC ACID (50% SOLUTION)	D	A	D	A	C	A	D	D	D	A	A	D	-	D	C	B/212	B/70	-	-	A
NITRIC ACID (CONCENTRATED SOLUTION)	D	A	D	A	A/120	A	D	D	D	A	A	-	A	D	C	-	D	D	C	A/125
NITRIC ACID - RED FUMING	D	B	D	A	A/B		-	-	D	A	-	-	-	D	C	-	D	-	-	D
NITROBENZENE	D	B	C	A	C	A	B	C	C	B	-	A	-	B/70	B	A/250	B/72	A	-	A/70
NITROBENZINE	-	A	C	A	-	-	-	-	-	-	-	-	-	-	B	-	-	-	-	A
NITRO ETHANE	D	C	B	A	A	-	-	-	A	A	-	A	-	-	B	-	C	-	-	-
NITROMETHANE	D	C	A	A	A	-	A	-	A	A	-	-	-	B/70	B	A/212	C	-	-	A/120
NITROUS ACID	-	-	-	-	-	B	-	-	-	-	-	-	-	-	-	A/212	-	-	-	-
NITROUS OXIDE	-	-	-	-	-	D	C	-	-	-	-	-	-	-	-	A/212	-	-	-	-
NITROGEN (GAS)	A	A	A	A	A	-	-	-	A	A	-	-	-	-	A	-	A	-	-	A
NITROGEN TETROXIDE	D	C	C	A	D	-	-	-	D	-	-	-	-	-	-	-	D	-	-	C
OCTADECANE	A	A	D	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
OCTANE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A/250	-	-	-	-
N-OCTANE	A	A	D	A	-	-	-	-	-	-	-	A	-	-	-	-	D	-	-	A
OCTACHLOROTOLUENE	D	A	D	A	D	-	-	-	-	-	-	-	-	-	-	-	D	-	-	-
OILS:						-	-	-			-	-	-			-		-	-	
ANILINE	D	A	B	A	C	A	-	A	A	A	-	-	-	A	D	-	A	-	-	A/70
ANISE	-	-	-	A	-	A	-	A	A	A	-	-	-	-	D	-	-	-	-	-
BAY	-	A	-	-	-	A	-	A	A	A	-	-	-	-	D	-	-	-	-	A
BONE	A	A	-	A	-	A	-	A	A	A	-	-	-	-	D	-	-	-	-	A
CASTOR	A	A	B	A	A	-	-	A	A	A	A	A	-	A	A	-	-	-	-	A
CINNAMON	-	-	-	-	-	-	-	-	-	A	-	-	-	-	D	-	-	-	-	-
CITRIC	A	A	B	A	A	-	-	D	D	A	-	-	-	-	A	-	A	-	-	A
CLOVE	A	-	-	-	B	-	-	-	-	A	-	-	-	-	B	-	B	-	-	-
COCONUT	A	A	A	A	B	-	-	A	A	A	-	A	-	-	A	-	A	-	-	A
COD LIVER	A	A	A	A	B	-	-	-	-	A	-	A	-	-	A	-	A	-	-	A
CORN	A	A	A	A	B	-	-	A	A	A	-	A	-	-	A	-	A	-	-	A
COTTON SEED	A	A	A	A	B	-	A	A	A	A	A	A	-	A	A	-	A	-	-	A
CREOSOTE	A	A	D	A	A	A	A	-	-	A	-	-	-	D	B	-	D	-	-	-
DIESEL FUEL (20, 30, 40, 50)	A	A	-	-	A	A	A	A	A	A	-	-	-	A	A	-	B/70	-	-	A
FUEL (1, 2, 3, 5A, 5B, 6)	B	A	D	A	A	A	A	A	A	A	-	-	-	A/70	A	-	B/70	-	-	A
GINGER	A	A	-	-	-	D	-	-	-	A	-	-	-	-	A	-	-	-	-	A
HYDRAULIC (SEE HYDRAULIC)						-	-	-			-	-	-					-	-	
LEMON	-	A	-	-	A	A	-	-	-	A	-	-	-	-	A	-	D	-	-	A
LINSEED	A	A	B	A	A	A	A	-	A	A	A	A	-	A/70	A	A/250	A	-	-	A
MINERAL	A	A	D	A	A	A	A	-	A	A	A	A	-	A	A	A/250	B	-	-	A
OLIVE	A	A	A	A	A	A	A	-	A	A	A	A	-	A/70	A	-	A	-	-	-
ORANGE	A	A	-	-	A	A	-	-	-	A	-	-	-	-	A	-	A	-	-	A
PALM	A	A	-	A	A	A	-	A	A	A	-	A	-	-	A	-	-	-	-	A

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PEANUT	A	A	C	A	A	A	-	A	A	A	-	A	-	-	A	-	B/175	-	-	A
PEPPERMINT	D	A	-	-	D	A	-	-	-	A	-	-	-	-	A	-	B/175	-	-	A
PINE	A	A	D	A	A	A	-	C	C	A	-	-	-	A	A	-	-	-	-	A
RAPE SEED	B	A	A	A	-	A	-	A	A	A	-	-	-	-	A	-	-	-	-	A
ROSIN	A	A	-	A	A	B	A	-	-	A	-	-	-	A/70	A	-	A	-	-	A
SESAME SEED	A	A	-	-	A	A	-	A	A	A	-	-	-	-	A	-	-	-	-	A
SILICONE	A	A	A	A	A	A	A	A	A	A	-	-	-	A/70	A	-	A	-	-	A
SOYBEAN	A	A	B	A	A	A	A	A	A	A	-	-	-	B/70	A	-	A	-	-	A
SPERM	A	A	-	-	-	A	-	A	A	A	-	-	-	-	A	-	-	-	-	A
TANNING	A	A	-	-	-	A	-	-	-	A	-	-	-	-	A	-	-	-	-	A
TURBINE	A	A	D	A	A	A	-	A	A	A	-	-	-	-	A	-	B/70	-	-	A
OLEIC ACID	B	B	B	A	B	B	A	-	C	A	A	-	-	B/120	A	A/250	B	-	-	A
OLEUM	C	A	D	A	D	D	D	-	D	A	-	-	A	D	D	-	D	-	-	D
OLEUM SPIRITS	C	A	C	A	D	-	-	-	D	B	-	-	-	-	-	-	D	-	-	D
O-DICHLOROBENZENE	D	A	A	-	A	-	-	-	A	-	-	B	-	-	A	-	D	-	-	-
OXALIC ACID (COLD)	B	A	A	A	C	B	A	C	D	A	A	C	-	B/120	B	A/250	A/70	-	-	A/120
OXGEN - COLD	C	A	B	A	A	-	-	-	A	A	-	-	-	B/70	C	A/250	C	-	-	A
OXYGEN - 200°-400°F	D	B	D	A	A	-	-	-	A	A	-	-	-	D	D	-	D	-	-	A
OZONE	D	A	A	A	B	B	-	-	-	-	-	-	-	-	D	A/212	D	-	-	A
PAINT THINNER, DUCO	A	B	D	A	A	-	-	-	A	A	-	-	-	-	A	-	D	-	-	-
PALMITIC ACID	A	A	B	A	C	A	A	-	C	A	-	C	-	C	A	A/250	A	-	-	A
PARAFFIN	A	A	D	A	A	A	A	-	-	A	A	A	-	A/70	A	-	A	-	-	A
PENTANE	A	A	D	A	A	C	A	-	-	C	-	A	-	A/70	A	-	-	-	A	A
PERCHLORIC ACID	D	A	B	A	D	B	A	-	D	D	-	-	-	D	C	-	A	-	A	A/120
PERCHLORIC ACID-10%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A/250	-	-	-	-
PERCHLORIC ACID-70%	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A/140	-	-	-	-
PERCHLOROETHYLENE	C	A	D	A	D	B	A	A	B	A	A	A	-	D	A	A/250	B/72	-	-	A
PETROLATUM	A	A	-	-	B	A	A	-	-	A	-	-	-	D	A	-	A	-	-	A
PETROLEUM - BELOW 250	A	A	D	A	A	A	A	-	A	A	-	-	-	A	A	A/250	A/70	-	-	A/200
PETROLEUM - ABOVE 250	C	B	D	A	A	-	-	-	A	A	-	-	-	D	A	A/250	-	-	-	-
PHENOL (CARBOLIC ACID)	D	A	C	A	B	B	A	D	D	A	A	A	-	C	A	A/212	C	A	C	A/70
PHENYLBENZENE	D	A	D	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PHENYL ETHYL ETHER	D	C	D	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PHENYL HYDRAZINE	D	A	C	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	D
PHORONE	D	A	C	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PHOSPHORIC ACID - 20%	C	A	A	A	D	-	-	-	D	B	-	D	A	D	D	A/250	A/120	A	-	A
PHOSPHORIC ACID (TO 40% SOLUTION)	D	A	B	A	D	B	B	-	D	A	A	D	A	D	D	A/250	A/120	-	A	A
PHOSPHORIC ACID - 45%	D	A	B	A	D	B	-	D	D	B	-	-	A	D	D	A/250	A/120	-	-	A
PHOSPHORIC ACID (40%-100% SOLUTION)	D	A	B	A	D	-	-	-	D	B	-	D	A	C	D	A/250	A/120	-	A	A
PHOSPHORIC ACID CRUDE	D	A	C	A	D	B	A	D	D	C	-	-	-	C	D	-	A/120	-	-	A
PHOSPHOROUS TRICHLORIDE ACID	D	A	A	A	D	-	A	-	B	A	-	-	-	-	D	A/250	D	-	-	A
PHOTOGRAPHIC (DEVELOPER)	A	A	-	-	C	A	A	D	D	A	A	-	-	-	A	A/250	A	-	-	-
PHTHALIC ACID	-	-	-	-	-	B	A	-	-	-	-	C	-	-	-	A/212	-	A	-	-
PHTHALIC ANHYDRIDE	-	-	-	-	-	A	A	-	-	-	-	B	-	-	-	A/212	-	-	-	-
PICKLING SOLUTION	-	B	C	A	-	-	-	-	-	-	-	-	-	-	D	-	-	-	-	-
PICRIC ACID	B	A	B	A	C	B	A	A	D	D	-	C	-	C	D	A/140	B/70	A	-	A/70

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CHEMICAL RESISTANCE GUIDE

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	BUNA-N	VITON®	EPDM	PTFE (TEFLON®)	ALUMINUM	BRONZE	CARBON GRAPHITE	GRAY IRON	DUCTILE IRON	STAINLESS STEEL (316)	995 CERAMIC (AL2O3)	TUNGSTEN CARBIDE	SSiC	NYLON	CARBON-FILLED ACETAL (CFA)	ETFE	POLYPROPYLENE	RULON®	PEEK	PVDF
PINENE	B	A	D	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PIPERIDINE	D	C	D	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PLATING SOLUTIONS:						-	D	-			-	-	-					-	-	
ANTIMONY	A	A	-	A	D	A	-	A	A	A	-	-	-	D	A/130	-	A	-	-	A/70
ARSENIC	A	A	-	A	C	A	-	A	A	A	-	-	-	A	A/110	-	A	-	-	-
BRASS	A	A	-	A	C	A	A	A	A	A	-	-	-	A	A/100	A/250	A	-	-	A
BRONZE	A	A	-	-	C	-	-	A	A	A	-	-	-	A	B	-	A	-	-	-
CADMIUM	A	A	-	A	C	-	-	D	-	-	-	-	-	A	C	A/250	A	-	-	A
CHROME	D	A	A	A	C	-	-	A	-	A	-	-	-	D	-	A/250	A	-	-	A
COPPER	A	A	-	A	C	-	-	D	-	-	-	-	-	A	-	A/250	A	-	-	A
GOLD	A	A	-	A	C	-	-	-	-	A	-	-	-	A/70	-	A/250	A	-	-	A
INDIUM	A	A	-	-	C	-	-	-	-	A	A	-	-	D	-	-	A	-	-	-
IRON	A	A	-	A	C	-	-	-	-	A	-	-	-	D	-	-	A	-	-	A
LEAD	A	A	-	A	C	-	-	-	-	-	A	-	-	D	-	-	A	-	-	A
NICKEL	A	A	-	A	C	-	-	-	-	-	-	-	-	A	-	-	A	-	-	A
SILVER	A	A	-	A	C	-	-	-	-	A	-	-	-	A/120	-	-	A	-	-	A
TIN	A	A	-	A	C	-	-	-	-	A	-	-	-	D	-	-	A	-	-	A
ZINC	A	A	-	A	C	-	-	-	-	A	-	-	-	D	-	-	A	-	-	A
POLYVINYL ACETATE EMULSION	-	-	A	A	-	-	-	-	B	-	-	A	-	-	A	-	B/70	-	-	A
POTASH	A	A	B	A	C	B	A	C	B	A	D	B	-	A	A	A/250	A	-	-	A
POTASSIUM ACETATE	B	B	A	A	D	-	-	-	A	B	-	-	-	-	A	-	A	-	-	A
POTASSIUM ALUMINUM SULFATE	-	-	-	-	-	-	-	-	-	-	-	C	-	-	-	A/250	-	-	-	-
POTASSIUM BICARBONATE	A	A	-	A	C	B	A	A	A	B	A	-	-	A/70	A	A/250	A	-	-	A
POTASSIUM BICHROMATE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A/250	-	-	-	-
POTASSIUM BROMIDE	A	A	A	A	C	B	A	D	D	A	C	-	-	A/70	A	A/250	A	-	-	A
POTASSIUM CARBONATE	A	A	A	A	C	-	-	-	B	A	-	-	-	A/70	A	A/250	A	-	-	A
POTASSIUM CHLORATE	A	A	A	A	B	B	A	C	C	A	B	-	-	C	A	A/250	A	-	-	A
POTASSIUM CHLORIDE	A	A	A	A	B	B	A	A	B	C	-	C	-	B/70	A	A/250	A	-	-	A
POTASSIUM CHROMATE	A	A	-	A	A	B	A	A	A	B	B	-	-	A	D	A/250	A	-	-	A
POTASSIUM CUPRO CYANIDE	A	A	A	A	-	-	-	-	-	-	-	-	-	-	C	-	-	-	-	-
POTASSIUM CYANIDE SOLUTIONS	A	A	A	A	D	D	A	B	B	A	D	D	-	A/70	C	A/250	A	-	-	A
POTASSIUM DICHROMATE	A	A	A	A	A	B	A	A	B	A	B	-	A	D	D	A/250	A	-	-	A
POTASSIUM HYDROXIDE	B	D	B	A	D	D	C	B	C	A	D	B	A	C	A	A/250	A	-	A	A/150
POTASSIUM HYPOCHLORITE	-	-	-	-	-	D	-	A	-	-	D	-	-	-	-	A/250	-	-	-	-
POTASSIUM IODIDE	-	-	-	-	-	A	A	A	-	-	B	-	-	-	-	A/212	-	-	-	-
POTASSIUM NITRATE	A	A	A	A	B	B	A	A	A	A	B	-	-	B/70	B	A/250	A	-	-	A
POTASSIUM PERMANGANATE	A	A	A	A	B	A	B	A	B	B	A	-	A	D	C	A/250	B	-	-	A
POTASSIUM SULFATE	A	A	A	A	A	A	A	A	B	B	A	B	-	A/70	B	A/250	A	-	-	A
POTASSIUM SULFIDE	-	-	-	-	-	D	A	B	-	-	A	B	-	-	-	A/250	-	-	-	-
PRODUCER GAS	A	A	C	A	-	-	-	-	-	-	-	-	-	-	A	-	-	-	-	-
PROPANE (LIQUIFIED)	A	A	D	A	A	A	A	A	A	A	-	A	-	A/70	A	A/250	B/72	-	-	B/200
PROPYL ACETATE	D	D	C	A	-	-	-	-	-	-	-	-	-	-	A	-	C	-	-	A/70
PROPYL ALCOHOL	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A/212	-	-	-	-
PROPYL NITRATE	-	C	B	A	A	-	-	-	D	-	-	-	-	-	A	-	-	-	-	-
PROPYLENE	D	A	D	A	A	-	A	A	A	A	-	A	-	-	A	-	-	-	-	-
PROPYLENE GLYCOL	A	A	A	A	A	A	-	A	B	A	A	A	-	-	D	A/100	A	-	-	A

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Rulon® is a registered trademark of Saint Gobain Performance Plastics

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PROPYLENE OXIDE	-	-	B	A	B	-	-	-	B	A	-	A	-	-	A	A/140	C	-	-	D
PYRANOL	A	A	D	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PYDRAULS	D	A	B	A	-	-	-	-	-	-	-	-	-	A/70	-	-	-	-	-	-
PYRIDINE	D	D	B	A	B	B	A	A	A	B	A	B	-	C	B	A/250	C	A	A	D
PYROGALLIC ACID	-	A	-	-	-	A	A	D	D	A	-	C	-	-	D	A/140	-	-	-	A
PYROLIGNEOUS ACID	C	A	B	A	D	-	-	-	C	B	-	-	-	-	-	-	-	-	-	-
PYRROLE	D	C	C	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
RADIATION	B	B	C	A	-	-	-	-	-	-	-	-	-	-	D	-	-	-	-	-
RED OIL	A	A	B	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
ROSINS	A	-	-	A	A	B	A	D	D	A	-	A	-	A/70	B	-	A	-	-	-
RUM	A	A	A	A	-	A	-	-	-	A	-	-	-	A	A	-	A	-	-	-
RUST INHIBITORS	A	A	-	-	-	A	-	C	C	A	-	-	-	-	A	-	A	-	-	-
SALAD DRESSING	A	A	-	-	B	-	-	D	D	A	-	-	-	A	A	-	A	-	-	-
SALICYLALDEHYDE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A/212	-	-	-	-
SALICYLIC ACID	-	-	-	-	-	A	A	A	-	-	-	C	-	-	-	A/250	-	A	-	-
SAL AMMONIAC	A	A	A	A	D	-	-	-	D	A	-	-	-	-	-	-	-	-	-	-
SEA WATER	A	A	A	A	D	A	A	D	D	C	-	-	-	A/120	A	-	A	-	-	A
SEWAGE	A	A	B	A	B	-	-	-	B	A	-	-	-	-	A	A/250	A	-	-	A
SHELLAC (BLEACHED)	A	-	-	-	A	A	A	A	A	A	-	-	-	A/70	A	-	A	-	-	-
SHELLAC (ORANGE)	A	-	-	-	A	A	A	A	A	A	-	-	-	A/70	A	-	A	-	-	-
SILICATE ESTERS	A	A	D	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
SILICONE	A	A	-	-	B	-	A	A	A	A	-	-	-	A/70	A	A/212	A	-	-	A
SILICONE GREASES	A	A	A	A	-	-	-	-	-	-	-	-	-	-	A	-	-	-	-	-
SILVER BROMIDE	-	-	-	-	D	D	-	D	D	B	-	-	-	-	A	-	-	-	-	-
SILVER CHLORIDE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A/250	-	-	-	-
SILVER CYANIDE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A/250	-	-	-	-
SILVER NITRATE	C	A	A	A	D	B	A	C	D	A	-	-	-	A/70	A	A/250	A	A	-	A
SKYDROL 500	D	C	A	A	-	-	-	-	-	-	-	-	-	C	A	-	-	-	-	-
SKYDROL 7000	D	B	C	A	-	-	-	-	-	-	-	-	-	C	A	-	-	-	-	-
SOAP SOLUTIONS	A	A	A	A	C	B	A	A	B	A	A	A	A	A/70	A	-	A	-	-	A
SODA ASH (SEE SODIUM CARBONATE)						B	-	B			-	-	-			-		-	-	
SODIUM ACETATE	B	D	A	A	B	B	A	B	B	A	A	-	-	B/70	A	A/250	A	-	-	A
SODIUM ALUMINATE	A	A	-	A	C	A	A	A	A	A	-	B	-	A/70	A	-	A	-	-	A
SODIUM BENZOATE	-	-	-	-	-	A	A	-	-	-	-	-	-	-	-	A/250	-	-	-	-
SODIUM BICARBONATE	A	A	A	A	A	A	A	C	C	A	A	B	-	A	A	A/250	A	-	-	A
SODIUM BICHROMATE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A/212	-	-	-	-
SODIUM BISULFATE	A	A	A	A	D	A	A	D	D	A	A	-	-	A/70	A	A/250	A	-	-	A
SODIUM BISULFITE	A	A	A	A	A	B	A	D	D	A	A	-	-	C	A	A/250	A	-	-	A
SODIUM BORATE	A	A	A	A	C	A	A	-	B	B	A	-	-	A/70	A	A/250	A/140	-	-	A
SODIUM BROMIDE	-	-	-	-	-	A	A	C	-	-	-	-	-	-	-	A/250	-	-	-	-
SODIUM CARBONATE	A	A	A	A	C	A	A	B	B	A	A	B	-	B/70	A	A/250	A	A	-	A
SODIUM CHLORATE	A	A	A	A	B	B	C	-	-	A	A	-	-	D	A	A/250	A	-	-	A
SODIUM CHLORIDE	A	A	A	A	C	B	A	D	B	C	A	B	A	A/70	A	-	A	-	-	A
SODIUM CHROMATE	A	A	-	A	D	B	A	A	B	-	-	B	-	D	D	-	A	-	-	A
SODIUM CYANIDE	A	A	A	A	D	D	A	A	B	A	A	D	-	A/70	B	A/250	A	-	-	A
SODIUM DICHROMATE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A/212	-	-	-	-

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SODIUM FLUORIDE	-	-	-	-	-	A	A	C	-	-	A	-	-	-	-	A/250	-	-	-	-
SODIUM HYDROXIDE (20%)	A	A	A	A	D	B	A	A	B	A	A	A	A	A	A	A/250	A	A	A	A
SODIUM HYDROXIDE (50% SOLUTION)	D	A	A	A	D	C	-	-	C	B	A	C	A	A	A	A/250	A	-	-	C
SODIUM HYDROXIDE (80% SOLUTION)	D	B	A	A	D	C	A	D	C	D	A	C	-	C	A	A/140	A	-	A	C
SODIUM HYPOCHLORITE (TO 20%)	C	A	C	A	D	C	B	D	D	C	A	C	A	D	D	A/250	B/72	-	-	A
SODIUM METAPHOSPHATE	A	A	A	A	A	A	A	C	C	A	-	B	-	A/70	B	-	D	-	-	-
SODIUM METASILICATE	A	A	-	-	B	A	-	A	A	A	-	C	-	-	D	A/250	-	-	-	-
SODIUM NITRATE	C	A	A	A	A	B	C	B	A	A	A	C	-	A/70	A	A/250	A	-	-	A
SODIUM NITRITE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A/250	-	A	-	-
SODIUM PERBORATE	B	A	A	A	B	B	C	C	C	C	-	B	-	B/70	B	A/250	A	-	-	A
SODIUM PEROXIDE	C	A	B	A	D	A	A	C	D	A	-	B	-	A/70	C	A/250	B/120	B	-	A
SODIUM PHOSPHATE	B	A	A	A	D	-	-	-	B	B	-	B	-	A/70	-	A/250	A	-	-	A
SODIUM POLYPHOSPHATE (MONO, DI, TRIBASIC)	A	A	-	-	D	B	A	D	D	A	-	-	-	A/70	B	-	A	-	-	A
SODIUM SILICATE	A	A	A	A	C	B	A	B	B	A	A	B	-	A/70	C	A/250	A	A	-	A
SODIUM SULFATE	A	A	A	A	B	B	A	B	A	A	A	B	-	A	B	A/250	A	-	-	A
SODIUM SULFIDE	A	A	A	A	D	B	A	C	A	A	A	B	A	A/70	B	A/250	A	A	-	A
SODIUM SULFITE	-	-	-	-	-	B	A	A	-	-	-	-	-	-	-	A/250	-	-	-	-
SODIUM TETRABORATE	A	A	A	A	C	A	A	-	-	A	-	-	-	A	B	-	-	-	-	-
SODIUM THIOSULPHATE ("HYPO")	B	A	A	A	B	A	A	C	C	A	-	B	-	B	C	A/250	A	-	-	A
SORGHUM	A	A	-	-	-	A	-	A	A	A	-	-	-	A	A	-	-	-	-	-
SOY SAUCE	A	A	B	A	A	A	-	D	D	A	-	-	-	A	A	-	-	-	-	-
STANNIC CHLORIDE	A	A	B	A	D	A	A	D	D	D	A	D	-	B	B	A/250	A	-	-	A
STANNIC FLUOBORATE	A	A	-	-	D	-	-	D	D	-	-	-	-	-	C	-	-	-	-	-
STANNOUS CHLORIDE	-	-	-	-	-	A	-	-	-	-	A	D	-	-	-	A/250	-	-	-	-
STARCH	A	A	A	A	A	-	A	C	C	A	A	A	-	A/70	A	-	-	A	-	-
STEAM TO 200°F	C	D	A	D	A	-	-	-	A	A	-	A	-	D	B	A/250	-	-	-	-
STEAM 220°F-300°F	D	D	A	D	A	-	-	-	A	A	-	-	-	D	D	A/250	-	-	-	-
STEARIC ACID	C	A	B	A	B	B	A	C	-	A	-	C	-	A/120	A	A/250	B/72	-	-	A
STODDARD SOLVENT	B	A	D	A	A	A	A	A	A	A	-	A	-	A	A	A/250	B/120	-	-	A
STYRENE	D	B	D	A	A	A	A	A	A	A	-	A	-	A/70	A	A/212	D	-	-	B
SUCROSE SOLUTION	A	A	A	A	-	-	-	-	B	-	-	-	-	A	A	-	-	-	-	-
SUGAR (LIQUIDS)	A	A	-	-	A	A	A	-	-	A	-	A	-	A/70	A	-	A	-	-	-
SULFATE LIQUORS	-	-	-	-	B	B	A	C	C	C	-	A	-	B/70	D	A/250	A	-	-	A
SULFITE LIQUORS	A	A	B	A	D	-	-	-	D	B	-	-	-	-	-	A/250	-	-	-	-
SULFUR	B	A	A	A	D	-	-	-	B	A	-	B	-	A/70	-	A/250	A	-	-	A
SULFUR CHLORIDE	D	A	D	A	D	B	D	D	D	D	-	-	-	A	D	A/140	C	-	-	A/70
SULFUR DIOXIDE	D	D	A	A	D	B	A	-	D	A	-	B	-	C	D	A/250	A/70	-	-	A
SULFUR HEXAFLUORIDE	B	A	A	A	D	-	-	-	D	-	-	-	-	-	D	-	-	-	-	-
SULFUR TRIOXIDE	C	A	C	A	D	C	B	B	D	B	-	-	-	-	-	-	-	-	-	-
SULFUR TRIOXIDE (DRY)	D	A	C	A	A	B	D	A	A	C	-	-	-	A/70	D	-	D	-	-	D
SULFURIC ACID (DILUTE)	D	A	-	A	D	-	-	-	D	B	-	-	-	C	D	A/250	A	-	-	A
SULFURIC ACID (TO 10%)	D	A	A	A	D	B	A	C	D	C	A	C	A	C	D	A/250	A/120	B	A	A
SULFURIC ACID (10%-75%)	D	A	C	A	D	B	A	D	D	C	A	D	A	D	D	A/250	A/72	-	C	A/150
SULFURIC ACID (CONCENTRATED TO 98%)	D	A	C	A	D	B	C	D	D	B	A	D	A	D	D	A/250	C/72	-	C	A/120
SULFURIC ACID (20% OLEUM)	D	B	D	A	D	-	-	-	D	-	-	-	-	D	D	A/250	D	-	-	-
SULFUROUS ACID	C	A	-	A	D	B	A	D	D	B	-	-	-	D	D	A/212	A	-	-	A

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CHEMICALS	ELASTOMERS				METALS									PLASTICS						
	BUNA-N	VITON®	EPDM	PTFE (TEFLON®)	ALUMINUM	BRONZE	CARBON GRAPHITE	GRAY IRON	DUCTILE IRON	STAINLESS STEEL (316)	995 CERAMIC (AL2O3)	TUNGSTEN CARBIDE	SSIC	NYLON	CARBON-FILLED ACETAL (CFA)	ETFE	POLYPROPYLENE	RULON®	PEEK	PVDF
SYRUP	A	A	-	-	A	-	-	-	-	A	-	-	-	-	A	-	A	-	-	-
TALL OIL	-	-	-	-	-	-	-	-	-	-	-	A	-	-	-	A/250	-	-	-	-
TALLOW	A	A	A	A	A	-	A	-	-	A	-	A	-	A/70	A	-	B/70	A	-	-
TANNIC ACID	A	A	C	A	C	B	A	C	C	A	A	C	-	C	B	A/250	A	A	-	A
TANNING LIQUORS	C	A	-	A	C	A	A	-	-	A	-	-	-	A/70	B	-	A	-	-	-
TAR, BITUMINOUS	B	A	D	A	-	-	-	-	B	B	-	-	-	B	B	-	-	-	-	-
TARTARIC ACID	A	A	B	A	C	B	A	C	C	A	A	-	-	B/70	B	A/250	A	-	-	A
TERPINEOL	C	A	B	A	A	-	-	-	A	A	-	-	-	-	-	-	D	-	-	B/120
TERTIARY BUTYL ALCOHOL	A	B	A	A	-	-	-	-	-	-	-	-	-	-	A	-	B	-	-	-
TERTIARY BUTYL CATECHOL	D	A	B	A	C	-	-	-	B	B	-	-	-	-	A	-	-	-	-	-
TERTIARY BUTYL MERCAPTAN	D	A	D	A	-	-	-	-	-	-	-	-	-	-	B	-	-	-	-	-
TETRA BROMOMETHANE	D	A	D	A	D	-	-	-	-	-	-	-	-	-	-	-	D	-	-	-
TETRABUTYL TITANATE	B	A	B	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TETRACHLOROETHYLENE	D	A	D	A	D	-	-	A	A	A	-	-	-	A/70	A	A/250	D	-	-	-
TETRACHLOROETHANE	D	A	D	A	D	-	-	A	A	A	-	-	-	C	A	A/140	D	-	-	-
TETRAETHYL LEAD	B	A	D	A	-	-	-	-	-	-	-	-	-	-	-	A/250	A/70	-	-	A
TETRAHYDROFURAN	D	B	C	A	-	-	-	-	-	A	-	A	-	A	C	A/212	C	-	A	B/70
TETRALIN	D	A	D	A	A	-	-	-	A	A	-	-	-	-	-	-	D	-	-	-
THIONYL CHLORIDE	D	A	D	A	D	-	-	-	D	-	-	-	-	C	-	A/212	D	-	-	D
TITANIUM TETRACHLORIDE	C	A	D	A	D	-	-	-	A	B	-	-	-	A/70	-	A/212	D	-	-	A
TOLUENE	C	A	D	A	A	-	-	-	A	A	-	A	A	A/70	A	A/250	D	-	A	A
TOLUENE DIISOCYANATE	-	-	A	A	-	-	-	-	-	-	-	A	-	-	C	-	-	-	-	-
TOLUENE, TOLUOL	D	A	D	A	A	A	A	A	A	A	A	-	-	A/70	A	-	B/175	-	-	A
TOMATO JUICE	A	-	-	A	A	A	A	-	-	A	-	A	-	A	A	A/212	A	-	-	A
TRANSFORMER OIL	B	A	D	A	A	-	-	-	A	A	-	-	-	A/70	A	-	B/70	-	-	-
TRANSMISSION FLUID TYPE A	A	A	D	A	A	-	-	-	A	A	-	-	-	-	A	-	-	-	-	-
TRIACETIN	A	C	A	A	B	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TRIBUTOXY ETHYL PHOSPHATE	D	B	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TRIBUTYL PHOSPHATE	D	D	C	A	-	-	-	-	A	-	-	-	-	-	-	A/140	A/70	-	-	A/70
TRIBUTYL MERCAPTAN	D	A	D	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TRICHLOROACETIC ACID	C	B	B	A	D	-	A	D	D	D	A	D	-	D	D	A/250	B/70	-	A	A/70
TRICHLORETHANE	D	A	D	A	D	A	A	B	B	A	-	A	A	C	A	-	D	-	A	A/120
TRICHLORETHYLENE	D	A	D	A	D	B	A	C	C	A	A	A	A	A/70	A	A/250	B/72	A	A	A
TRICHLOROPROPANE	A	A	-	A	D	A	-	A	A	A	-	-	-	-	A	-	D	-	-	-
TRICRESYLPHOSPHATE	D	B	A	A	D	A	A	B	B	A	D	-	-	A/120	C	-	B/70	-	-	-
TRIETHYLAMINE	A	A	-	A	-	-	A	A	A	-	B	-	-	A/70	A	A/212	C	-	-	A/120
TRIETHANOL AMINE	B	B	B	A	B	-	-	-	A	A	-	A	-	A/70	A	A/140	A/70	-	-	A/70
TRIETHYL ALUMINUM	D	B	-	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TRIETHYL BORANE	D	A	-	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TRINITROTOLUENE	D	C	D	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TRIOCTYL PHOSPHATE	D	B	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TRISODIUM PHOSPHATE	-	-	-	-	-	A	A	-	-	-	-	A	-	-	-	A/250	-	-	-	-
TRIARYL PHOSPHATE	D	A	A	A	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
TUNG OIL	A	B	C	A	A	-	-	-	B	B	-	A	-	-	-	-	-	-	-	-
TURPENTINE	A	A	D	A	A	A	A	-	B	A	A	A	A	A/70	A	A/250	B/175	-	-	A
UNLEADED GASOLINE	D	A	D	A	A	-	-	-	A	A	-	-	-	A	A	-	D	-	-	C

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	BUNA-N	VITON®	EPDM	PTFE (TEFLON®)	ALUMINUM	BRONZE	CARBON GRAPHITE	GRAY IRON	DUCTILE IRON	STAINLESS STEEL (316)	995 CERAMIC (AL2O3)	TUNGSTEN CARBIDE	SSiC	NYLON	CARBON-FILLED ACETAL (CFA)	ETFE	POLYPROPYLENE	RULON®	PEEK	PVDF
URINE	-	-	-	-	-	A	A	A	-	-	-	-	-	-	-	A/212	-	-	-	-
VARNISH	-	-	-	-	-	-	A	C	-	-	-	A	-	-	-	A/212	-	-	-	-
VINEGAR	-	-	-	-	-	A	A	D	-	-	A	C	-	-	-	A/212	-	-	-	-
VINYL ACETATE	-	-	-	-	-	-	A	B	-	-	B	B	-	-	-	A/250	-	-	-	-
WATER, ACID, MINE	-	-	-	-	-	A	A	D	-	-	A	-	-	-	-	A/212	-	-	-	-
WATER, DEMINERALIZED	-	-	-	-	-	-	A	D	-	-	B	-	-	-	-	A/212	-	-	-	-
WATER, DISTILLED, LAB GRADE 7	-	-	-	-	-	A	A	D	-	-	-	B	-	-	-	A/212	-	-	A	-
WATER, FRESH	-	-	-	-	-	A	A	D	-	-	A	B	-	-	-	A/250	-	-	-	-
WATER, SALT	B	A	A	A	D	A	A	D	D	C	B	B	-	A/120	A	A/250	A	-	-	A
WHITE LIQUOR (PULP MILL)	-	-	-	-	-	A	A	C	-	-	-	-	-	-	-	A/212	-	-	-	-
WINES	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A/212	-	-	-	-
XYLENE	-	-	-	-	-	A	A		-	-	A	A	A	-	-	A/250	-	-	A	-
ZINC CHLORIDE	-	-	-	-	-	B	A	D	-	-	D	D	A	-	-	A/250	-	A	-	-
ZINC NITRATE	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	A/250	-	-	-	-
ZINC SULFATE	-	-	-	-	-	B	A	D	-	-	D	B	A	-	-	A/250	-	-	-	-

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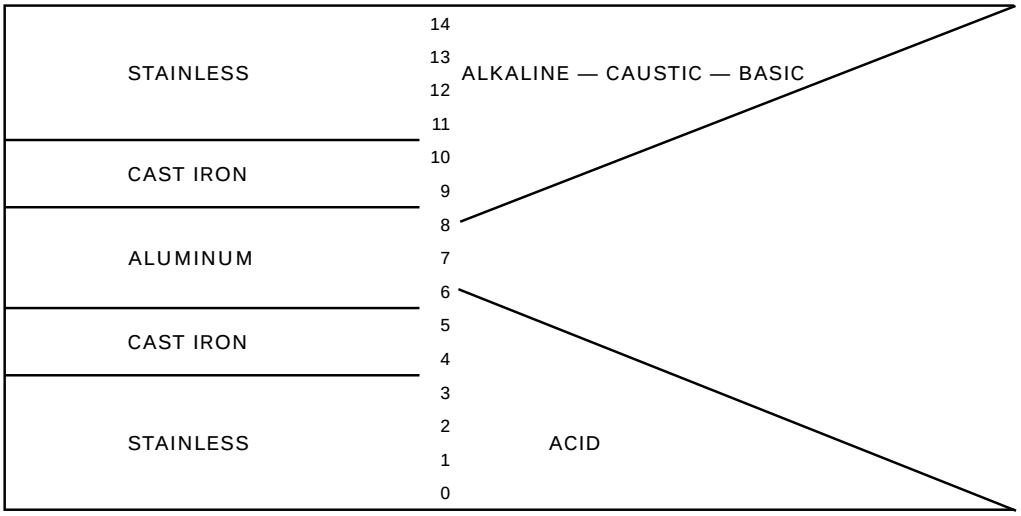
HALOGENATED SOLVENTS WARNING

Halogenated solvents can, under certain circumstances, corrode aluminum or galvanized parts. If the wetted parts or a pressurizable fluid system contain aluminum or galvanized parts, this corrosive action could cause an EXPLOSION. Although manufacturers of these solvents typically add inhibitors, there is no known inhibitor that will prevent the corrosive reaction under ALL circumstances. Special caution should be exercised handling reclaimed or used solvents since the inhibitors are often degraded. ONLY stainless steel or PVDF pumps should be used for these materials. Typical examples of halogenated hydrocarbon solvents (H.H.C.) include, but are not limited to, the following: Trichlorethane, Trichlorethylene, Methylene Chloride, Methyl Chloride, Carbon Tetrachloride, Chloroform, Dichlorethylene.

- **Determine the pH value:**
- pH is a measure of hydrogen-ion concentration. pH of 7 is neutral — below 7, acid — above 7, alkaline.



ELASTOMER SELECTION GUIDE FOR SOLVENTS

The liquids classified and listed below usually **cannot** be handled with Neoprene or Buna-N and will probably require Viton®, EPDM and/or Teflon®.

a. **Ketones and Aldehydes**
1. Methyl ethyl ketone
2. Methylacetone
3. Acetone
4. Formaldehyde

→ Wil-Flex™ Nordel/Teflon®

b. **Acetates**
1. Ethyl acetate
2. Isopropyl acetate
3. Amyl acetate
4. Butyl acetate

→ Wil-Flex™ Nordel/Teflon®

c. **Aromatic Hydrocarbons**
1. Benzene
2. Toluol (toluene)
3. Xylene (xyol)
4. Benzol
5. Hexane
6. Cyclohexane
7. Napthalene

→ Viton®/Teflon®

d. **Chlorinated Hydrocarbons**
1. Carbon tetrachloride
2. Trichlorethylene
3. Ethylene dichloride
4. Methyl chloride
5. Propyl chloride
6. Chloroform
7. Dichlorethylene

→ Viton®/Teflon®

TEMPERATURE LIMITS

TEMPERATURE LIMITS FOR ELASTOMERS

Buna-N	–12.2°	to 82.2° C	(+10° to +180° F)
EPDM	–51.1°	to 137.8° C	(–60° to +280° F)
Viton®	–40 °	to 176.7° C	(–40° to +350° F)
Teflon® PTFE[1]	4.4°	to 104.4° C	(+40° to +220° F)

TEMPERATURE LIMITS FOR PLASTICS

Peek		to 250° C	(to +480° F)
Rulon®	–240 °	to 288° C	(–400° to +550° F)
ETFE	–100°	to 155° C	(–148° to +311° F)
Polypropylene	0°	to 79.4° C	(+32° to +175° F)
PVDF	–12.2°	to 107.2° C	(+10° to +225° F)
Acetal	–28.9°	to 82.2° C	(–20° to +180° F)
Nylon	–17.8°	to 93.3° C	(0° to +200° F)

NOTE: These are average temperatures. Chemicals and solvents can have an effect on temperature limits

RUBBER COMPOUNDS

Listed below are the various rubber compounds manufactured for use as elastomers in Typhoon pumps. These compounds consist of natural rubber and man-made additives to increase the compounds' resistance to specific types of fluids.

COMPOUND	TEMPERATURE LIMITS	SUITABLE APPLICATIONS
Buna-N	–12.2° to 82.2° C +10° to +180° F	Excellent for applications involving petroleum/oil-based fluids such as leaded gasolines, fuel oils, non-synthetic hydraulic oils, kerosene, turpentines and motor oils.
EPDM	–51.1° to 137.8° C –60° to +280° F	Excellent for use in applications requiring extremely cold temperatures. May also be used as a low cost alternative when pumping dilute acids or caustics.
Viton®	–40° to 176.7° C –40° to +350° F	Excellent for use in applications requiring extremely hot temperatures. May also be used with aggressive fluids such as aromatic or chlorinated hydrocarbons and highly aggressive acids.

TEFLON® COMPOUNDS

Teflon® PTFE is one of the most chemically inert man-made compounds known.

COMPOUND	TEMPERATURE LIMITS	SUITABLE APPLICATIONS
Teflon® PTFE	– 4.4° to 104.4 ° C +40° to +220 ° F	Excellent choice when pumping highly aggressive fluids such as aromatic or chlorinated hydrocarbons, acids, caustics, ketones and acetates.