



Innovators in Flow Technology



## Resistance Chart

- Barrel, Drum and Container Pumps
- High Viscosity Liquid Pumps
- Centrifugal Immersion Pumps
- Liquid Meters



# Construction materials of pumps and liquid meters ...



**... show very different characteristics. Not every material suits every liquid to the same extent.**

The FLUX Resistance Chart assists you in selecting your pump and/or liquid meter. It is a clearly arranged guide to show you which material suits which liquid or – the other way round – which “combinations” you should better avoid. Please consider that the chemical resistance of the construction material depends on many parameters. Even slight variations of a liquid (e.g. impurities) may have a great influence on the chemical resistance of this product.

If there are no particular indications given in this chart, the information is based on commercial purity and concentration. In case of doubt, especially for new and unknown applications, we kindly ask you to contact us for further verification.

The information given in this Resistance Chart is based on recommendations by our suppliers, reports of our clients and on the experience gained by us. This chart has been compiled by our specialists with greatest circumspection. Nevertheless this chart may only serve as a guide. Our classification may not be applied to every condition of use. Considering the multitude of decisive factors, the chemical resistance is an important one, but, in the end, only one element in the totality of operating conditions. This is the reason why we cannot assume any liability for the indications in this Resistance Chart.

## **The indications are as follows:**

- + = resistant
- o = limited resistance
- = not resistant

## **Note**

**For transferring highly flammable liquids, which are underlined in red, only pumps in stainless steel or Hastelloy C together with explosion-proof motors must be used, which are tested and certified according to ATEX-Directive 94/9/EC. Please observe all relevant Health & Safety Regulations.**



## Resistance Chart

Description	Chemical Formula	Concentration in %	Density [kg/dm³]	Danger class (VbF)	Temperature [°C]	Stainless Steel 316 Ti	Hastelloy C	Aluminium alloy	PP	PVDF	ETFE	PPS	FKM	NBR	EPDM	PTFE/FEP	FFKM
Accumulator Acid		See Sulphuric Acid 40 %															
Acetaldehyde	CH <sub>3</sub> CHO	40			20	+	+	+	+	+	+	+	+	-	+	+	+
Acetaldehyde	CH <sub>3</sub> CHO	40			40	+	+	+	○	+	+	+	+	-	+	+	+
Acetaldehyde	CH <sub>3</sub> CHO	40			60	+	+	○	○	+	+	+	○	-	+	+	+
Acetaldehyde	CH <sub>3</sub> CHO	TR	0,79	B	20	+	+	○	○	+	+	+	○	-	○	+	+
Acetaldehyde	CH <sub>3</sub> CHO	TR			40	+	+	-	-	○	+	+	-	-	○	+	+
Acetamide	CH <sub>3</sub> CO-NH <sub>2</sub>	TR	0,98		20	+	+	○	+	+	+	+	+	+	+	+	+
Acetamide	CH <sub>3</sub> CO-NH <sub>2</sub>	TR			40	+	+	○	+	+	+	+	+	○	+	+	+
Acetamide	CH <sub>3</sub> CO-NH <sub>2</sub>	TR			60	+	+	-	○	+	+	+	+	-	○	+	+
Acetanhydride	(CH <sub>3</sub> CO) <sub>2</sub> O	TR	1,09	All	20	+	+	+	○	○	+	+	○	-	○	+	+
Acetanhydride	(CH <sub>3</sub> CO) <sub>2</sub> O	TR			40	+	+	+	○	-	+	+	-	-	-	+	+
Acetanhydride	(CH <sub>3</sub> CO) <sub>2</sub> O	TR			60	+	+	○	○	-	+	+	-	-	-	+	+
Acetic Acid	CH <sub>3</sub> COOH	10			20	+	+	○	+	+	+	+	○	○	+	+	+
Acetic Acid	CH <sub>3</sub> COOH	10			40	+	+	○	+	+	+	+	-	-	+	+	+
Acetic Acid	CH <sub>3</sub> COOH	10			60	+	+	-	+	+	+	+	-	-	○	+	+
Acetic Acid	CH <sub>3</sub> COOH	25			20	+	+	○	+	+	+	+	-	-	+	+	+
Acetic Acid	CH <sub>3</sub> COOH	25			40	+	+	○	+	+	+	+	-	-	○	+	+
Acetic Acid	CH <sub>3</sub> COOH	25			60	+	+	-	+	+	+	+	-	-	-	+	+
Acetic Acid	CH <sub>3</sub> COOH	50			20	+	+	○	+	+	+	+	-	-	○	+	+
Acetic Acid	CH <sub>3</sub> COOH	50			40	+	+	○	+	+	+	+	-	-	○	+	+
Acetic Acid	CH <sub>3</sub> COOH	50			60	+	+	-	+	+	+	+	-	-	-	+	+
Acetic Acid	CH <sub>3</sub> COOH	80			20	+	+	-	+	+	+	+	-	-	○	+	+
Acetic Acid	CH <sub>3</sub> COOH	80			40	+	+	-	+	+	+	+	-	-	○	+	+
Acetic Acid	CH <sub>3</sub> COOH	80			60	+	+	-	○	+	+	+	-	-	-	+	+
Acetic Acid	CH <sub>3</sub> COOH	100	1,05		20	+	+	-	○	+	+	+	-	-	○	+	+
Acetic Acid	CH <sub>3</sub> COOH	100			40	+	+	-	○	+	+	+	-	-	-	+	+
Acetic Acid	CH <sub>3</sub> COOH	100			60	+	+	-	○	○	+	+	-	-	-	+	+
Acetic Anhydride		See Acetanhydride															
Acetic Ether		See Ethyl Acetate															
Acetic Methyl Ester	CH <sub>3</sub> CO <sub>2</sub> CH <sub>3</sub>	100	0,93	AI	20	+	+	-	+	+	+	+	-	-	-	+	+
Acetic Methyl Ester	CH <sub>3</sub> CO <sub>2</sub> CH <sub>3</sub>	100			40	+	+	-	+	○	+	+	-	-	-	+	+
Acetic Methyl Ester	CH <sub>3</sub> CO <sub>2</sub> CH <sub>3</sub>	100			60	+	+	-	+	-	+	+	-	-	-	+	+
Acetone	CH <sub>3</sub> CO-CH <sub>3</sub> +H <sub>2</sub> O	10		B	20	+	+	+	+	+	+	+	○	-	+	+	+
Acetone	CH <sub>3</sub> CO-CH <sub>3</sub> +H <sub>2</sub> O	10			40	+	+	+	+	+	+	+	○	-	○	+	+
Acetone	CH <sub>3</sub> CO-CH <sub>3</sub> +H <sub>2</sub> O	10			60	+	+	○	○	+	+	+	-	-	-	+	+
Acetone	CH <sub>3</sub> CO-CH <sub>3</sub>	TR	0,79	B	20	+	+	+	+	○	+	+	-	-	+	+	+
Acetone	CH <sub>3</sub> CO-CH <sub>3</sub>	TR			40	+	+	○	+	○	+	+	-	-	○	+	+
Acetone	CH <sub>3</sub> CO-CH <sub>3</sub>	TR			60	+	+	○	○	-	+	+	-	-	-	+	+
Acetonitrile	CH <sub>3</sub> -CN	TR	0,78	B	20	+	+	+	+	○	+	+	○	-	○	+	+
Acetonitrile	CH <sub>3</sub> -CN	TR			40	+	+	+	+	-	+	+	○	-	-	+	+
Acetonitrile	CH <sub>3</sub> -CN	TR			60	-	+	+	+	-	+	+	○	-	-	+	+
Acetylene Dichloride		See Dichloroethylene 1,1															
Acrylonitrile	CH <sub>2</sub> =CH-CN	TR	0,81	AI	20	+	+	+	+	+	+	+	○	-	○	+	+
Acrylonitrile	CH <sub>2</sub> =CH-CN	TR			40	+ <sup>1)</sup>	+	+	○	○	+	○	○	-	○	+	+
Acrylonitrile	CH <sub>2</sub> =CH-CN	TR			60	+ <sup>1)</sup>	+	+	○	○	+	○	○	-	-	+	+
Adipic Acid	C <sub>6</sub> H <sub>12</sub> O <sub>2</sub>	GL	0,89	All	20	+	+	○	+	+	+	+	+	+	+	+	+

TR = technically pure, GL = saturated solution, H = commercial composition  
+ = resistant, ○ = limited resistance, - = not resistant, <sup>1)</sup> Not resistant on FMC



## Resistance Chart

Description	Chemical Formula	Concentration in %	Density [kg/dm <sup>3</sup> ]	Danger class (VbF)	Temperature [°C]	Stainless Steel 316 Ti	Hastelloy C	Aluminium alloy	PP	PVDF	ETFE	PPS	FKM	NBR	EPDM	PTFE/FEP	FFKM	
Adipic Acid	C <sub>6</sub> H <sub>12</sub> O <sub>2</sub>	GL			40	+	+	-	+	+	+	+	+	+	+	+	+	
Adipic Acid	C <sub>6</sub> H <sub>12</sub> O <sub>2</sub>	GL			60	+	+	-	+	+	+	+	+	+	+	+	+	
Allyl Alcohol	H <sub>2</sub> C=CH-CH <sub>2</sub> -OH	96	0,87	B	20	+	+	o	+	+	+	+	o	+	o	+	+	
Allyl Alcohol	H <sub>2</sub> C=CH-CH <sub>2</sub> -OH	96			40	+	+	o	+	+	+	+	-	+	o	+	+	
Allyl Alcohol	H <sub>2</sub> C=CH-CH <sub>2</sub> -OH	96			60	+	+	o	+	+	+	+	-	+	o	+	+	
Alum					See Potassium Aluminium Sulphate													
Aluminium Chloride	AlCl <sub>3</sub>	10			20	o	+	-	+	+	+	+	+	+	+	+	+	
Aluminium Chloride	AlCl <sub>3</sub>	10			40	o	+	-	+	+	+	+	+	+	+	+	+	
Aluminium Chloride	AlCl <sub>3</sub>	10			60	o	+	-	+	+	+	+	+	o	+	+	+	
Aluminium Chloride	AlCl <sub>3</sub>	GL	2,40		20	-	+	-	+	+	+	+	+	+	+	+	+	
Aluminium Chloride	AlCl <sub>3</sub>	GL			40	-	+	-	+	+	+	+	+	+	+	+	+	
Aluminium Chloride	AlCl <sub>3</sub>	GL			60	-	o	-	+	+	+	+	+	+	+	+	+	
Aluminium Nitrate	Al(NO <sub>3</sub> ) <sub>3</sub>	GL			20	+	+	-	+	+	+	+	+	+	+	+	+	
Aluminium Nitrate	Al(NO <sub>3</sub> ) <sub>3</sub>	GL			40	+	+	-	+	+	+	+	+	+	+	+	+	
Aluminium Nitrate	Al(NO <sub>3</sub> ) <sub>3</sub>	GL			60	o	+	-	+ <sup>1)</sup>	+	+	-	+	o	+	+	+	
Aluminium Sulphate	Al <sub>2</sub> (SO <sub>4</sub> ) <sub>3</sub>	10			20	+	+	-	+	+	+	+	+	+	+	+	+	
Aluminium Sulphate	Al <sub>2</sub> (SO <sub>4</sub> ) <sub>3</sub>	10			40	+	+	-	+	+	+	+	+	+	+	+	+	
Aluminium Sulphate	Al <sub>2</sub> (SO <sub>4</sub> ) <sub>3</sub>	10			60	+	+	-	+	+	+	+	+	+	+	+	+	
Aluminium Sulphate	Al <sub>2</sub> (SO <sub>4</sub> ) <sub>3</sub>	GL	1,61		20	+	+	-	+	+	+	+	+	+	+	+	+	
Aluminium Sulphate	Al <sub>2</sub> (SO <sub>4</sub> ) <sub>3</sub>	GL			40	o	+	-	+	+	+	+	+	+	+	+	+	
Aluminium Sulphate	Al <sub>2</sub> (SO <sub>4</sub> ) <sub>3</sub>	GL			60	o	o	-	+	+	+	+	+	o	+	+	+	
Amino Acid Amide					See Formamide													
Ammonia Solution					See Ammonia Water													
Ammonia Water	NH <sub>4</sub> ClOH	GL			20	+	+	+	+	+	+	+	-	+	+	+	+	
Ammonia Water	NH <sub>4</sub> ClOH	GL			40	+	+	+	+	+	+	+	-	o	+	+	+	
Ammonia Water	NH <sub>4</sub> ClOH	GL			60	+	+	+	+	+	+	+	-	o	+	+	+	
Ammonium Acetate	CH <sub>3</sub> -COONH <sub>4</sub> Cl+H <sub>2</sub> O				20	+	+	+	+	+	+	+	+	+	+	+	+	
Ammonium Acetate	CH <sub>3</sub> -COONH <sub>4</sub> Cl+H <sub>2</sub> O				40	+	+	o	+	+	+	+	+	+	+	+	+	
Ammonium Acetate	CH <sub>3</sub> -COONH <sub>4</sub> Cl+H <sub>2</sub> O				60	+ <sup>1)</sup>	+	o	+ <sup>1)</sup>	+	+	o	+	+	+	+	+	
Ammonium Bromide	NH <sub>4</sub> Br+H <sub>2</sub> O	40	1,27		20	o	+	-	+	+	+	+	+	+	+	+	+	
Ammonium Bromide	NH <sub>4</sub> Br+H <sub>2</sub> O	40			40	o	+	-	+	+	+	+	+	+	+	+	+	
Ammonium Bromide	NH <sub>4</sub> Br+H <sub>2</sub> O	40			60	-	o	-	+	+	+	+	+	+	+	+	+	
Ammonium Carbonate	(NH <sub>4</sub> ) <sub>2</sub> CO <sub>3</sub> +H <sub>2</sub> O	25			20	+	+	+	+	+	+	+	+	+	+	+	+	
Ammonium Carbonate	(NH <sub>4</sub> ) <sub>2</sub> CO <sub>3</sub> +H <sub>2</sub> O	25			40	+	+	+	+	+	+	+	+	+	+	+	+	
Ammonium Carbonate	(NH <sub>4</sub> ) <sub>2</sub> CO <sub>3</sub> +H <sub>2</sub> O	25			60	+	+	+	+	+	+	+	+	+	+	+	+	
Ammonium Chloride	NH <sub>4</sub> Cl+H <sub>2</sub> O	GL	1,07		20	+	+	-	+	+	+	+	+	+	+	+	+	
Ammonium Chloride	NH <sub>4</sub> Cl+H <sub>2</sub> O	GL			40	+	+	-	+	+	+	+	+	+	+	+	+	
Ammonium Chloride	NH <sub>4</sub> Cl+H <sub>2</sub> O	GL			60	o	+	-	+	+	+	+	+	+	+	+	+	
Ammonium Fluoride	NH <sub>4</sub> F+H <sub>2</sub> O	14			20	o	+	-	+	+	+	+	+	+	+	+	+	
Ammonium Fluoride	NH <sub>4</sub> F+H <sub>2</sub> O	14			40	o	+	-	+	+	+	+	+	+	+	+	+	
Ammonium Fluoride	NH <sub>4</sub> F+H <sub>2</sub> O	14			60	-	+	-	+	+	+	+	+	+	o	+	+	
Ammonium Fluosilicate	(NH <sub>4</sub> )SiF <sub>6</sub> +H <sub>2</sub> O	TR			20	+	+	-	+	+	+	+	+	+	+	+	+	
Ammonium Hydrogen Fluoride	(NH <sub>4</sub> )HF <sub>2</sub>	50			20	o	o	-	+	+	+	+	+	-	+	+	+	
Ammonium Hydrogen Fluoride	(NH <sub>4</sub> )HF <sub>2</sub>	50			40	-	o	-	+	+	+	+	o	-	-	+	+	
Ammonium Hydrogen Fluoride	(NH <sub>4</sub> )HF <sub>2</sub>	50			60	-	o	-	+	+	+	+	o	-	-	+	+	
Ammonium Monophosphate					See Ammonium Phosphate													
Ammonium Nitrate	NH <sub>4</sub> NO <sub>3</sub> +H <sub>2</sub> O	10			20	+	+	+	+	+	+	+	+	+	+	+	+	
Ammonium Nitrate	NH <sub>4</sub> NO <sub>3</sub> +H <sub>2</sub> O	10			40	+	+	+	+	+	+	+	+	+	+	+	+	
Ammonium Nitrate	NH <sub>4</sub> NO <sub>3</sub> +H <sub>2</sub> O	10			60	+	+	+	+	+	+	+	+	o	+	+	+	



## Resistance Chart

Description	Chemical Formula	Concentration in %	Density [kg/dm³]	Danger class (VbF)	Temperature [°C]	Stainless Steel 316 Ti	Hastelloy C	Aluminium alloy	PP	PVDF	ETFE	PPS	FKM	NBR	EPDM	PTFE/FEP	FFKM		
Ammonium Nitrate	$\text{NH}_4\text{NO}_3 + \text{H}_2\text{O}$	50	1,23		20	+	+	+	+	+	+	+	+	+	+	+	+		
Ammonium Nitrate	$\text{NH}_4\text{NO}_3 + \text{H}_2\text{O}$	50			40	+	+	+	+	+	+	+	+	+	+	+	+		
Ammonium Nitrate	$\text{NH}_4\text{NO}_3 + \text{H}_2\text{O}$	50			60	+	+	+	+	+	+	+	+	○	+	+	+		
Ammonium Nitrate	$\text{NH}_4\text{NO}_3 + \text{H}_2\text{O}$	GL			20	+	+	+	+	+	+	+	+	+	+	+	+		
Ammonium Nitrate	$\text{NH}_4\text{NO}_3 + \text{H}_2\text{O}$	GL			40	+	+	+	+	+	+	+	+	+	+	+	+		
Ammonium Nitrate	$\text{NH}_4\text{NO}_3 + \text{H}_2\text{O}$	GL			60	+	+	+	+	+	+	+	+	○	+	+	+		
Ammonium Oxalate	$(\text{COONH}_4)_2 + \text{H}_2\text{O}$	TR	1,50		20	+	+	+	+	+	+	+	+	+	+	+	+		
Ammonium Oxalate	$(\text{COONH}_4)_2 + \text{H}_2\text{O}$	TR			40	+	+	+	○	+	+	+	+	+	+	+	+		
Ammonium Oxalate	$(\text{COONH}_4)_2 + \text{H}_2\text{O}$	TR			60	+	+	+	○	+	+	+	+	+	○	+	+		
Ammonium Perchlorate	$\text{NH}_4\text{ClO}_4 + \text{H}_2\text{O}$	14	1,07		20	+	+	+	○	+	+	+	+	○	○	+	+		
Ammonium Perchlorate	$\text{NH}_4\text{ClO}_4 + \text{H}_2\text{O}$	14			40	○	+	○	○	+	+	+	+	-	○	+	+		
Ammonium Perchlorate	$\text{NH}_4\text{ClO}_4 + \text{H}_2\text{O}$	14			60	○	○	-	○	+	+	+	+	-	○	+	+		
Ammonium Phosphate	$\text{NH}_4\text{H}_2\text{PO}_4 + \text{H}_2\text{O}$	10			20	+	+	-	+	+	+	+	+	+	+	+	+		
Ammonium Phosphate	$\text{NH}_4\text{H}_2\text{PO}_4 + \text{H}_2\text{O}$	10			40	+	+	-	+	+	+	+	+	+	+	+	+		
Ammonium Phosphate	$\text{NH}_4\text{H}_2\text{PO}_4 + \text{H}_2\text{O}$	10			60	+	+	-	+	+	+	+	+	○	+	+	+		
Ammonium Sulphate	$(\text{NH}_4)_2\text{SO}_4 + \text{H}_2\text{O}$	10			20	+	+	+	+	+	+	+	+	+	+	+	+		
Ammonium Sulphate	$(\text{NH}_4)_2\text{SO}_4 + \text{H}_2\text{O}$	10			40	+	+	○	+	+	+	+	+	+	+	+	+		
Ammonium Sulphate	$(\text{NH}_4)_2\text{SO}_4 + \text{H}_2\text{O}$	10			60	+ <sup>1)</sup>	+	○	+ <sup>1)</sup>	+	+	○	+	○	+	+	+		
Ammonium Sulphate	$(\text{NH}_4)_2\text{SO}_4 + \text{H}_2\text{O}$	50	1,28		20	+	+	+	+	+	+	+	+	+	+	+	+		
Ammonium Sulphate	$(\text{NH}_4)_2\text{SO}_4 + \text{H}_2\text{O}$	50			40	+ <sup>1)</sup>	+	○	+ <sup>1)</sup>	+	+	○	+	+	+	+	+		
Ammonium Sulphate	$(\text{NH}_4)_2\text{SO}_4 + \text{H}_2\text{O}$	50			60	+ <sup>1)</sup>	+	○	+ <sup>1)</sup>	+	+	○	+	○	+	+	+		
Ammonium Sulphate	$(\text{NH}_4)_2\text{SO}_4 + \text{H}_2\text{O}$	50			20	+ <sup>1)</sup>	+	+	+ <sup>1)</sup>	+	+	○	+	+	+	+	+		
Ammonium Sulphate	$(\text{NH}_4)_2\text{SO}_4 + \text{H}_2\text{O}$	50			40	+ <sup>1)</sup>	+	○	+ <sup>1)</sup>	+	+	○	+	+	+	+	+		
Ammonium Sulphate	$(\text{NH}_4)_2\text{SO}_4 + \text{H}_2\text{O}$	50			60	+ <sup>1)</sup>	+	○	+ <sup>1)</sup>	+	+	○	+	○	+	+	+		
Ammonium Sulphate	$(\text{NH}_4)_2\text{SO}_4 + \text{H}_2\text{O}$	GL	1,30		20	+ <sup>1)</sup>	+	+	+ <sup>1)</sup>	+	+	○	+	+	+	+	+		
Ammonium Sulphate	$(\text{NH}_4)_2\text{SO}_4 + \text{H}_2\text{O}$	GL			40	+ <sup>1)</sup>	+	○	+ <sup>1)</sup>	+	+	○	+	+	+	+	+		
Ammonium Sulphate	$(\text{NH}_4)_2\text{SO}_4 + \text{H}_2\text{O}$	GL			60	+ <sup>1)</sup>	+	-	+ <sup>1)</sup>	+	+	-	+	○	+	+	+		
Ammonium Sulphide	$\text{NH}_4\text{S} + \text{H}_2\text{O}$	10			20	+	+	-	+	+	+	+	+	+	+	+	+		
Ammonium Sulphide	$\text{NH}_4\text{S} + \text{H}_2\text{O}$	10			40	+ <sup>1)</sup>	+	-	+ <sup>1)</sup>	+	+	○	+	○	+	+	+		
Ammonium Sulphide	$\text{NH}_4\text{S} + \text{H}_2\text{O}$	10			60	+ <sup>1)</sup>	+	-	+ <sup>1)</sup>	+	+	○	+	○	+	+	+		
Amyl Acetate	$\text{CH}_3\text{-COOC}_5\text{H}_{11}$	TR	0,88	All	20	+	+	+	○	+	+	+	-	-	○	+	+		
Amyl Acetate	$\text{CH}_3\text{-COOC}_5\text{H}_{11}$	TR			40	+	+	+	-	○	+	+	-	-	-	+	+		
Amyl Acetate	$\text{CH}_3\text{-COOC}_5\text{H}_{11}$	TR			60	+ <sup>1)</sup>	+	+	-	○	+	○	-	-	-	+	+		
Amyl Alcohol	$\text{C}_5\text{H}_{11}\text{OH}$	TR	0,82	All	20	+	+	+	+	+	+	+	+	+	+	+	+		
Amyl Alcohol	$\text{C}_5\text{H}_{11}\text{OH}$	TR			40	+	+	○	+	+	+	+	+	○	+	+	+		
Amyl Alcohol	$\text{C}_5\text{H}_{11}\text{OH}$	TR			60	+	+	○	+	+	+	+	+	○	○	+	+		
Amyl Chloride	$\text{CH}_3(\text{CH}_2)_4\text{Cl}$	TR	0,87	AI	20	○	+	-	+	+	+	+	+	○	+	+	+		
Amyl Chloride	$\text{CH}_3(\text{CH}_2)_4\text{Cl}$	TR			40	-	+	-	○	+	+	+	+	○	+	+	+		
Amyl Chloride	$\text{CH}_3(\text{CH}_2)_4\text{Cl}$	TR			60	-	○	-	○	+	+	○	○	○	○	+	+		
Aniline	$\text{C}_6\text{H}_5\text{NH}_2$	TR	1,01	All	20	+	+	+	○	+	+	+	+	-	○	+	+		
Aniline	$\text{C}_6\text{H}_5\text{NH}_2$	TR			40	+	+	+	-	○	+	+	○	-	-	+	+		
Aniline	$\text{C}_6\text{H}_5\text{NH}_2$	TR			60	+ <sup>1)</sup>	+	+	-	○	+	○	○	-	-	+	+		
Anone					See Cyclohexanone														
Aqua Regia	$3\text{HCl} + \text{HNO}_3$				20	-	-	-	-	○	+	-	○	-	○	+	+		
Aqua Regia	$3\text{HCl} + \text{HNO}_3$				40	-	-	-	-	-	+	-	-	-	-	+	+		
Aqua Regia	$3\text{HCl} + \text{HNO}_3$				60	-	-	-	-	-	+	-	-	-	-	+	+		
Arsenic Acid	$\text{H}_3\text{ASO}_4$	10			20	+	+	-	+	+	+	+	+	+	+	+	+		
Arsenic Acid	$\text{H}_3\text{ASO}_4$	10			40	+	+	-	+	+	+	+	+	+	+	+	+		
Arsenic Acid	$\text{H}_3\text{ASO}_4$	10			60	+	+	-	+	+	+	+	+	+	+	+	+		
Arsenic Acid	$\text{H}_3\text{ASO}_4$	80			20	+	+	-	+	+	+	+	+	+	+	+	+		
Arsenic Acid	$\text{H}_3\text{ASO}_4$	80			40	+	+	-	+	+	+	+	+	+	+	+	+		
Arsenic Acid	$\text{H}_3\text{ASO}_4$	80			60	+	+	-	+	+	+	+	+	+	+	+	+		

TR = technically pure, GL = saturated solution, H = commercial composition  
 + = resistant, ○ = limited resistance, - = not resistant, <sup>1)</sup> Not resistant on FMC



## Resistance Chart

Description	Chemical Formula	Concentration in %	Density [kg/dm³]	Danger class (VbF)	Temperature [°C]	Stainless Steel 316 Ti	Hastelloy C	Aluminium alloy	PP	PVDF	ETFE	PPS	FKM	NBR	EPDM	PTFE/FEP	FFKM	
Barium Chloride	BaCl <sub>2</sub>	10			20	-	+	o	+	+	+	+	+	+	+	+	+	
Barium Chloride	BaCl <sub>2</sub>	10			40	-	+	o	+	+	+	+	+	+	+	+	+	
Barium Chloride	BaCl <sub>2</sub>	25	1,27		20	o	+	o	+	+	+	+	+	+	+	+	+	
Barium Chloride	BaCl <sub>2</sub>	25			40	o	+	o	+	+	+	+	+	+	+	+	+	
Barium Hydroxide	Ba(OH) <sub>2</sub>	GL			20	+ <sup>1)</sup>	+	-	+ <sup>1)</sup>	+	+	o	+	+	+	+	+	
Barium Hydroxide	Ba(OH) <sub>2</sub>	GL			40	+ <sup>1)</sup>	+	-	+ <sup>1)</sup>	+	+	o	+	+	+	+	+	
Barium Hydroxide	Ba(OH) <sub>2</sub>	GL			60	+ <sup>1)</sup>	+	-	+ <sup>1)</sup>	o	+	o	+	+	+	+	+	
Barium Sulphide	BaS	10			20	+	+	+	+	+	+	+	+	+	+	+	+	
Benzaldehyde	C <sub>6</sub> H <sub>5</sub> CHO		1,05		20	+ <sup>1)</sup>	+	+	o	+	+	o	+	o	o	+	+	
Benzaldehyde	C <sub>6</sub> H <sub>5</sub> CHO				40	+ <sup>1)</sup>	+	+	o	o	+	o	+	o	o	+	+	
Benzaldehyde	C <sub>6</sub> H <sub>5</sub> CHO				60	+ <sup>1)</sup>	+	+	-	o	+	-	+	o	o	+	+	
Benzaldehyde	C <sub>6</sub> H <sub>5</sub> CHO	30			20	+ <sup>1)</sup>	+	o	-	+	+	o	+	-	-	+	+	
Benzaldehyde	C <sub>6</sub> H <sub>5</sub> CHO	TR	1,05	AIII	20	+	+	o	o	+	+	o	-	o	+	+	+	
Benzene	C <sub>6</sub> H <sub>6</sub>	TR	0,88	AI	20	+	+	+	-	+	+	+	+	-	-	+	+	
Benzoic Acid	C <sub>6</sub> H <sub>5</sub> COOH	10	1,27		20	+	+	+	+	+	+	+	+	-	-	+	+	
Benzoic Acid	C <sub>6</sub> H <sub>5</sub> COOH	10			40	+	+	o	+	+	+	+	+	-	-	+	+	
Benzoic Acid	C <sub>6</sub> H <sub>5</sub> COOH	10			60	+	+	o	o	+	+	+	+	-	-	+	+	
Benzyl Alcohol	C <sub>6</sub> H <sub>5</sub> -CH <sub>2</sub> OH	TR	1,04		20	+	+	+	+	+	+	+	o	-	+	+	+	
Benzyl Alcohol	C <sub>6</sub> H <sub>5</sub> -CH <sub>2</sub> OH	TR			40	+	+	+	+	+	+	+	o	-	o	+	+	
Benzyl Alcohol	C <sub>6</sub> H <sub>5</sub> -CH <sub>2</sub> OH	TR			60	+	+	+	o	+	+	+	o	-	o	+	+	
Benzyl Chloride	C <sub>6</sub> H <sub>5</sub> -CH <sub>2</sub> Cl		1,11	AIII	20	+	+	-	-	+	+	+	+	-	-	+	+	
Benzyl Chloride	C <sub>6</sub> H <sub>5</sub> -CH <sub>2</sub> Cl				40	+	+	-	-	+	+	+	+	-	-	+	+	
Benzyl Chloride	C <sub>6</sub> H <sub>5</sub> -CH <sub>2</sub> Cl				60	+	+	-	-	o	+	+	+	-	-	+	+	
Bitter Almond Oil					See Benzaldehyde													
Bitter Salt					See Magnesium Sulphate													
Bleaching Solution					See Sodium Hypochlorite													
Blue Vitriol					See Copper Sulphate													
Borax	Na <sub>2</sub> B <sub>4</sub> O <sub>7</sub> +10 H <sub>2</sub> O	10	1,03		20	+	+	-	+	+	+	+	+	+	+	+	+	+
Borax	Na <sub>2</sub> B <sub>4</sub> O <sub>7</sub> +10 H <sub>2</sub> O	10			40	+	+	-	+	+	+	+	+	+	+	+	+	+
Borax	Na <sub>2</sub> B <sub>4</sub> O <sub>7</sub> +10 H <sub>2</sub> O	10			60	+	+	-	+	+	+	+	+	+	+	+	+	+
Borax	Na <sub>2</sub> B <sub>4</sub> O <sub>7</sub> +10 H <sub>2</sub> O	GL			20	+	+	-	+	+	+	+	+	+	+	+	+	+
Borax	Na <sub>2</sub> B <sub>4</sub> O <sub>7</sub> +10 H <sub>2</sub> O	GL			40	+	+	-	+	+	+	+	+	+	+	+	+	+
Borax	Na <sub>2</sub> B <sub>4</sub> O <sub>7</sub> +10 H <sub>2</sub> O	GL			60	+	+	-	+	+	+	+	+	+	+	+	+	+
Boric Acid	H <sub>3</sub> BO <sub>3</sub> +H <sub>2</sub> O	10	1,01		20	+	+	+	+	+	+	+	+	+	+	+	+	+
Boric Acid	H <sub>3</sub> BO <sub>3</sub> +H <sub>2</sub> O	10			40	+	+	+	+	+	+	+	+	+	+	+	+	+
Boric Acid	H <sub>3</sub> BO <sub>3</sub> +H <sub>2</sub> O	10			60	+	+	+	+	+	+	+	+	+	+	+	+	+
Boric Acid	H <sub>3</sub> BO <sub>3</sub> +H <sub>2</sub> O	GL			20	+	+	-	+	+	+	+	+	+	+	+	+	+
Boric Acid	H <sub>3</sub> BO <sub>3</sub> +H <sub>2</sub> O	GL			40	+	+	-	+	+	+	+	+	+	+	+	+	+
Boric Acid	H <sub>3</sub> BO <sub>3</sub> +H <sub>2</sub> O	GL			60	+	+	-	+	+	+	+	+	+	+	+	+	+
Boron Trifluoride	BF <sub>3</sub> +H <sub>2</sub> O	10			20	o	o	-	+	+	+	+	+	+	+	+	+	+
Brake Fluid	Glycol Ether					+	+	+	+	+	+	+	+	-	-	+	+	+
Bromic Acid	HBrO <sub>3</sub>	10			20	o	+	-	+ <sup>1)</sup>	+	+	o	+	-	+	+	+	+
Bromic Acid	HBrO <sub>3</sub>	10			40	-	+	-	+ <sup>1)</sup>	+	+	o	+	-	+	+	+	+
Bromic Acid	HBrO <sub>3</sub>	10			60	-	+	-	o	+	+	o	+	-	o	+	+	+
Bromine	Br <sub>2</sub>	TR	3,19		20	-	+	-	-	+	+	-	o	-	-	+	+	+
Butane Carbonic Acid					See Butyric Acid													
Butane Diol	HO(CH <sub>2</sub> ) <sub>4</sub> OH	10			20	+	+	+	+	+	+	+	+	+	+	+	+	+
Butane Diol	HO(CH <sub>2</sub> ) <sub>4</sub> OH	10			40	+	+	+	+	+	+	+	+	+	+	+	+	+
Butane Diol	HO(CH <sub>2</sub> ) <sub>4</sub> OH	10			60	+	+	+	+	+	+	+	+	+	+	+	+	+
Butane Diol	HO(CH <sub>2</sub> ) <sub>4</sub> OH	TR			20	+	+	+	o	+	+	+	+	+	+	+	+	+

TR = technically pure, GL = saturated solution, H = commercial composition  
 + = resistant, o = limited resistance, - = not resistant, <sup>1)</sup> Not resistant on FMC



## Resistance Chart

Description	Chemical Formula	Concentration in %		Density [kg/dm³]	Danger class (VbF)	Temperature [°C]	Stainless Steel 316 Ti	Hastelloy C	Aluminium alloy	PP	PVDF	ETFE	PPS	FKM	NBR	EPDM	PTFE/FEP	FFKM
Butane Diol	HO(CH <sub>2</sub> ) <sub>4</sub> OH	TR				40	+	+	○	○	+	+	+	+	-	+	+	+
Butane Diol	HO(CH <sub>2</sub> ) <sub>4</sub> OH	TR				60	+	+	-	○	+	+	+	○	-	+	+	+
Butane Triol	C <sub>4</sub> H <sub>10</sub> O <sub>3</sub>	TR				20	+	+	-	+	+	+	+	○	+	+	+	+
Butanol	C <sub>4</sub> H <sub>9</sub> OH	TR	0,81	All		20	+	+	+	+	+	+	+	+	+	+	+	+
Butanol	C <sub>4</sub> H <sub>9</sub> OH	TR				40	+	+	+	○	+	+	○	○	+	+	+	+
Butanol	C <sub>4</sub> H <sub>9</sub> OH	TR				60	+	+	+	○	+	+	-	○	+	+	+	+
Butanone (MEK)	C <sub>4</sub> H <sub>8</sub> O	TR	0,81	AI		20	+	+	-	+	-	+	○	-	-	+	+	+
Butanone (MEK)	C <sub>4</sub> H <sub>8</sub> O	TR				40	+	+	-	○	-	+	-	-	-	○	+	+
Butanone (MEK)	C <sub>4</sub> H <sub>8</sub> O	TR				60	+	+	-	○	-	+	-	-	-	○	+	+
Butenal, trans-2-		See Propylene Aldehyde																
Butyl Acetate	C <sub>6</sub> H <sub>12</sub> O <sub>2</sub>	TR	0,88	All	20	+ <sup>1)</sup>	+	+	○	+	+	+	○	-	+	+	+	+
Butyl Acrylate	C <sub>5</sub> H <sub>8</sub> O <sub>2</sub>	TR		AI	20	+	+	○	-	○	+	+	-	-	○	+	+	+
Butyl Alcohol			See Butanol															
Butyl Chloride	C <sub>4</sub> H <sub>9</sub> Cl	TR	0,89	AI	20	○	+	-	+	+	+	+	-	-	-	-	+	+
Butyl Chloride	C <sub>4</sub> H <sub>9</sub> Cl	TR			40	○	+	-	+ <sup>1)</sup>	+	+	○	-	-	-	-	+	+
Butyl Chloride	C <sub>4</sub> H <sub>9</sub> Cl	TR			60	○	+	-	+ <sup>1)</sup>	+	+	○	-	-	-	-	+	+
Butyl Ether			See Dibutyl Ether															
Butyl Phenol	HOCH <sub>2</sub> H <sub>4</sub> C(CH <sub>3</sub> ) <sub>3</sub>	TR			20	+	+	-	+	+	+	+	○	-	-	+	+	+
Butyric Acid	C <sub>3</sub> H <sub>7</sub> COOH	20	0,88		20	+	+	+	-	+	+	+	+	+	-	+	+	+
Butyric Acid	C <sub>3</sub> H <sub>7</sub> COOH	TR	0,96		20	+	+	+	-	+	+	+	○	-	○	+	+	+
Calcium Bisulphite	Ca(HSO <sub>3</sub> ) <sub>2</sub>	10			20	+ <sup>1)</sup>	+	○	+ <sup>1)</sup>	+	+	○	+	-	+	+	+	+
Calcium Bisulphite	Ca(HSO <sub>3</sub> ) <sub>2</sub>	GL			20	+ <sup>1)</sup>	+	○	+ <sup>1)</sup>	+	+	-	+	-	+	+	+	+
Calcium Bisulphite	Ca(HSO <sub>3</sub> ) <sub>2</sub>	GL			40	+ <sup>1)</sup>	+	○	+ <sup>1)</sup>	+	+	-	+	-	+	+	+	+
Calcium Bisulphite	Ca(HSO <sub>3</sub> ) <sub>2</sub>	GL			60	+ <sup>1)</sup>	+	○	+ <sup>1)</sup>	+	+	-	+	-	+	+	+	+
Calcium Chlorate	Ca(ClO <sub>3</sub> ) <sub>2</sub> + H <sub>2</sub> O	10			20	+	+	○	+	+	+	+	+	+	+	+	+	+
Calcium Chloride	CaCl <sub>2</sub> + H <sub>2</sub> O	10			20	+	+	+	+	+	+	+	+	+	+	+	+	+
Calcium Chloride	CaCl <sub>2</sub> + H <sub>2</sub> O	10			40	+	+	+	+	+	+	+	+	+	+	+	+	+
Calcium Chloride	CaCl <sub>2</sub> + H <sub>2</sub> O	10			60	○	○	+	+	+	+	+	+	+	+	+	+	+
Calcium Chloride	CaCl <sub>2</sub> + H <sub>2</sub> O	GL	1,40		20	+	+	○	+	+	+	+	+	+	+	+	+	+
Calcium Chloride	CaCl <sub>2</sub> + H <sub>2</sub> O	GL			40	+	+	○	+	+	+	+	+	+	+	+	+	+
Calcium Chloride	CaCl <sub>2</sub> + H <sub>2</sub> O	GL			60	○	+	○	+	+	+	+	+	+	+	+	+	+
Calcium Hydroxide	Ca(OH) <sub>2</sub>	15			20	+	+	-	+	+	+	+	+	+	+	+	+	+
Calcium Hydroxide	Ca(OH) <sub>2</sub>	15			40	+	+	-	+	+	+	+	+	+	+	+	+	+
Calcium Hydroxide	Ca(OH) <sub>2</sub>	15			60	+	+	-	+	+	+	+	+	+	○	+	+	+
Calcium Hypochlorite	Ca(OCl) <sub>2</sub>	10			20	○	+	-	+ <sup>1)</sup>	+	+	○	+	+	+	+	+	+
Calcium Hypochlorite	Ca(OCl) <sub>2</sub>	10			40	○	+	-	+ <sup>1)</sup>	+	+	○	+	○	+	+	+	+
Calcium Hypochlorite	Ca(OCl) <sub>2</sub>	10			60	-	○	-	+ <sup>1)</sup>	+	+	○	+	-	+	+	+	+
Calcium Nitrate	Ca(NO <sub>3</sub> ) <sub>2</sub>	50	1,48		20	+	+	+	+	+	+	+	+	+	+	+	+	+
Calcium Nitrate	Ca(NO <sub>3</sub> ) <sub>2</sub>	50			40	+	+	+	+	+	+	+	+	+	+	+	+	+
Camphor	C <sub>10</sub> H <sub>16</sub> O				20	+	+	+	+	+	+	+	+	○	+	○	+	+
Camphor	C <sub>10</sub> H <sub>16</sub> O				40	+	+	+	+	+	+	+	+	○	○	○	○	+
Camphor	C <sub>10</sub> H <sub>16</sub> O				60	+	+	+	+	+	+	+	+	○	○	○	○	+
Caprylic Acid	CH <sub>3</sub> (CH <sub>2</sub> ) <sub>6</sub> COOH		0,92		20	+ <sup>1)</sup>	+	-	+ <sup>1)</sup>	+	+	○	+	-	+	+	+	+
Caprylic Acid	CH <sub>3</sub> (CH <sub>2</sub> ) <sub>6</sub> COOH				40	+ <sup>1)</sup>	+	-	○	+	+	○	+	-	○	+	+	+
Caprylic Acid	CH <sub>3</sub> (CH <sub>2</sub> ) <sub>6</sub> COOH				60	+ <sup>1)</sup>	+	-	-	+	+	○	○	-	-	+	+	+
Carbamide			See Urea															
Carboxylic Acid			See Phenol															
Carbon Bisulphide	CS <sub>2</sub>	TR	1,27	AI	20	+ <sup>1)</sup>	+	+	+ <sup>1)</sup>	+	+	○	+	-	○	+	+	+
Carbon Bisulphide	CS <sub>2</sub>	TR			40	+ <sup>1)</sup>	+	+	○	+	+	○	+	-	-	+	+	+
Carbon Bisulphide	CS <sub>2</sub>	TR			60	+	+	+	○	+	+	-	+	-	-	-	+	+

TR = technically pure, GL = saturated solution, H = commercial composition  
 + = resistant, ○ = limited resistance, - = not resistant, <sup>1)</sup> Not resistant on FMC



## Resistance Chart

Description	Chemical Formula	Concentration in %	Density [kg/dm <sup>3</sup> ]	Danger class (VbF)	Temperature [C°]	Stainless Steel 316 Ti	Hastelloy C	Aluminium alloy	PP	PVDF	ETFE	PPS	FKM	NBR	EPDM	PTFE/FEP	FFKM
Carbon Disulphide																	
Carbon Tetrachloride																	
Carbonic Acid																	
Caster Oil																	
Caustic Baryta																	
Caustic Potash Solution																	
Caustic Soda																	
Cellosolve																	
Chloric Acid	HClO <sub>3</sub>	10			20	o	+	-	+ <sup>1)</sup>	+	+	-	+	-	+	+	+
Chloric Acid	HClO <sub>3</sub>	10			40	o	o	-	+ <sup>1)</sup>	+	+	-	+	-	+	+	+
Chloric Acid	HClO <sub>3</sub>	10			60	o	o	-	o	+	+	-	+	-	+	+	+
Chlorinated Diphenyl	C <sub>12</sub> H <sub>9</sub> Cl	TR			20	+ <sup>1)</sup>	+	+	-	+	+	o	+	-	-	+	+
Chlorine Bleaching																	
Chlorine Water	Cl <sub>2</sub> + H <sub>2</sub> O	GL			20	o	+	-	o	+	+	o	-	-	+	+	+
Chlorine Water	Cl <sub>2</sub> + H <sub>2</sub> O	GL			40	o	+	-	o	+	+	o	-	-	+	+	+
Chlorine Water	Cl <sub>2</sub> + H <sub>2</sub> O	GL			60	o	o	-	o	+	+	-	-	-	o	+	+
Chloroacetic Acid	C <sub>2</sub> H <sub>3</sub> ClO <sub>2</sub>	85	1,36		20	-	+	-	+ <sup>1)</sup>	+	+	o	+	-	+	+	+
Chloroacetic Acid	C <sub>2</sub> H <sub>3</sub> ClO <sub>2</sub>	85			40	-	o	-	+ <sup>1)</sup>	+	+	-	+	-	+	+	+
Chloroacetic Acid	C <sub>2</sub> H <sub>3</sub> ClO <sub>2</sub>	85			60	-	o	-	+ <sup>1)</sup>	+	+	-	+	-	+	+	+
Chloroacetic Acid	C <sub>2</sub> H <sub>3</sub> ClO <sub>2</sub>	98			20	-	+	-	+ <sup>1)</sup>	+	+	o	+	-	+	+	+
Chloroacetic Acid	C <sub>2</sub> H <sub>3</sub> ClO <sub>2</sub>	98			40	-	o	-	+ <sup>1)</sup>	+	+	-	+	-	+	+	+
Chloroacetic Acid	C <sub>2</sub> H <sub>3</sub> ClO <sub>2</sub>	98			60	-	o	-	+ <sup>1)</sup>	+	+	-	+	-	+	+	+
Chlorobenzene	C <sub>6</sub> H <sub>5</sub> Cl	TR	1,11	All	20	+	+	+	o	+	+	+	+	-	-	+	+
Chlorobenzene	C <sub>6</sub> H <sub>5</sub> Cl	TR			40	+	+	+	o	+	+	+	-	-	-	+	+
Chlorobenzene	C <sub>6</sub> H <sub>5</sub> Cl	TR			60	+	+	+	-	+	+	+	-	-	-	+	+
Chlorobutane																	
Chloroethane	C <sub>2</sub> H <sub>5</sub> Cl	TR	0,92		20	+	+	+	-	+	+	+	o	-	o	+	+
Chloroethanol	ClH <sub>2</sub> C-CH <sub>2</sub> OH	TR	1,20		20	+ <sup>1)</sup>	+	-	+ <sup>1)</sup>	+	+	o	-	+	o	+	+
Chloroethanol	ClH <sub>2</sub> C-CH <sub>2</sub> OH	TR			40	+ <sup>1)</sup>	+	-	+ <sup>1)</sup>	o	+	o	-	o	o	+	+
Chloroethanol	ClH <sub>2</sub> C-CH <sub>2</sub> OH	TR			60	+ <sup>1)</sup>	+	-	+ <sup>1)</sup>	o	+	o	-	-	o	+	+
Chloroethene																	
Chloroform	CHCl <sub>3</sub>	TR	1,48		20	+ <sup>1)</sup>	+	-	o	+	+	-	o	-	-	+	+
Chlorosulphonic Acid	HOSO <sub>2</sub> Cl	TR	1,77		20	+ <sup>1)</sup>	+	-	-	-	+	-	o	-	-	+	+
Chlorotoluene																	
Chromic Acid	CrO <sub>3</sub> +H <sub>2</sub> O	30			20	o	+	-	o	+	+	o	+	-	-	+	+
Chromic Acid	CrO <sub>3</sub> +H <sub>2</sub> O	50			20	o	o	-	-	+	+	o	+	-	-	+	+
Chromic Acid	CrO <sub>3</sub> +H <sub>2</sub> O	50			40	o	o	-	-	+	+	-	+	-	-	+	+
Chromic Acid	CrO <sub>3</sub> +H <sub>2</sub> O	50			60	o	o	-	-	+	+	-	+	-	-	+	+
Chromic-Sulphuric-Acid-Mixture	H <sub>2</sub> SO <sub>4</sub> +H <sub>2</sub> O+CrO <sub>3</sub>	50			20	o	o	-	o	+	+	-	+	-	-	+	+
Chromic-Sulphuric-Acid-Mixture	H <sub>2</sub> SO <sub>4</sub> +H <sub>2</sub> O+CrO <sub>3</sub>	50			40	o	o	-	-	+	+	-	+	-	-	+	+
Chromic-Sulphuric-Acid-Mixture	H <sub>2</sub> SO <sub>4</sub> +H <sub>2</sub> O+CrO <sub>3</sub>	50			60	o	o	-	-	+	+	-	+	-	-	+	+
Chromium Trioxide																	
Citric Acid	C <sub>6</sub> H <sub>8</sub> O <sub>7</sub>	50	1,22		20	+	+	-	+	+	+	+	+	+	+	+	+
Citric Acid	C <sub>6</sub> H <sub>8</sub> O <sub>7</sub>	50			40	o	+	-	+	+	+	+	+	+	+	+	+
Citric Acid	C <sub>6</sub> H <sub>8</sub> O <sub>7</sub>	50			60	o	+	-	+	+	+	+	+	+	+	+	+
Clophene																	
Clove Oil																	
Copper Acetate	(CH <sub>3</sub> CO <sub>2</sub> ) <sub>2</sub> Cu	50			20	+	+	-	+	+	+	+	+	+	+	+	+
Copper Acetate	(CH <sub>3</sub> CO <sub>2</sub> ) <sub>2</sub> Cu	50			40	+	+	-	+	+	+	+	+	+	+	+	+
Copper Acetate	(CH <sub>3</sub> CO <sub>2</sub> ) <sub>2</sub> Cu	50			60	+	+	-	+	+	+	+	+	+	o	+	+

TR = technically pure, GL = saturated solution, H = commercial composition  
+ = resistant, o = limited resistance, - = not resistant, <sup>1)</sup> Not resistant on FMC



## Resistance Chart

Description	Chemical Formula	Concentration in %	Density [kg/dm³]	Danger class (VbF)	Temperature [C°]	Stainless Steel 316 Ti	Haysteel C	Aluminium alloy	PP	PVDF	ETFE	PPS	FKM	NBR	EPDM	PTFE/FEP	FFKM
Copper Nitrate	<chem>Cu(NO3)2</chem>	25	1,25		20	+	+	+	o	+	+	+	+	+	+	+	+
Copper Nitrate	<chem>Cu(NO3)2</chem>	25			40	+	+	+	o	+	+	+	+	+	+	+	+
Copper Nitrate	<chem>Cu(NO3)2</chem>	25			60	+	+	+	o	+	+	+	+	o	+	+	+
Copper Sulphate	<chem>CuSO4</chem>	18	1,21		20	+	+	-	+	+	+	+	+	+	+	+	+
Copper Sulphate	<chem>CuSO4</chem>	18			40	+	+	-	+	+	+	+	+	+	+	+	+
Copper Sulphate	<chem>CuSO4</chem>	18			60	+	+	-	+	+	+	+	+	+	+	+	+
Copper Sulphate	<chem>CuSO4</chem>	GL			20	+	+	-	o	+	+	+	+	+	+	+	+
Copper Sulphate	<chem>CuSO4</chem>	GL			40	+	+	-	o	+	+	+	+	+	+	+	+
Copper Sulphate	<chem>CuSO4</chem>	GL			60	+	+	-	o	+	+	+	+	o	+	+	+
Corn Oil		TR			20	+	+	-	+	+	+	+	+	+	+	+	+
Corn Oil		TR			40	+	+	-	+	+	+	+	+	+	o	+	+
Corn Oil		TR			60	+	+	-	o	+	+	+	+	+	-	+	+
Crotonaldehyde		See Propylenaldehyd															
Cupric Chloride	<chem>CuCl2</chem>	20	1,21		20	o	+	-	+	+	+	+	+	+	+	+	+
Cupric Chloride	<chem>CuCl2</chem>	20			40	o	+	-	+	+	+	+	+	+	+	+	+
Cupric Chloride	<chem>CuCl2</chem>	20			60	o	+	-	+	+	+	+	+	+	+	+	+
Cuprous Chloride	<chem>CuCl</chem>	10			20	o	+	-	+	+	+	+	+	+	+	+	+
Cuprous Chloride	<chem>CuCl</chem>	10			40	o	+	-	+	+	+	+	+	+	+	+	+
Cuprous Chloride	<chem>CuCl</chem>	10			60	o	+	-	+	+	+	+	+	+	+	+	+
Cyclohexane	<chem>C6H12</chem>	TR	0,78	All	20	+	+	+	+	+	+	+	+	+	-	+	+
Cyclohexane	<chem>C6H12</chem>	TR			40	+	+	+	+	+	+	+	+	+	-	+	+
Cyclohexane	<chem>C6H12</chem>	TR			60	+	+	+	o	+	+	+	o	-	-	+	+
Cyclohexanol	<chem>C6H12O</chem>	TR	0,94	AllII	20	+	+	-	+	+	+	+	o	o	o	+	+
Cyclohexanol	<chem>C6H12O</chem>	TR			40	+	+	-	+	+	+	+	o	o	o	+	+
Cyclohexanone	<chem>C6H10O</chem>	TR	0,95	AllI	20	+	+	+	+	+	+	+	-	-	o	+	+
Decahydronaphthalin		See Decalin															
Decalin	<chem>C10H18</chem>	TR	0,88	AllII	20	+	+	+	o	+	+	+	+	o	-	+	+
Decalin	<chem>C10H18</chem>	TR			40	+ <sup>1)</sup>	+	+	o	+	+	o	+	o	-	+	+
Decalin	<chem>C10H18</chem>	TR			60	+ <sup>1)</sup>	+	+	o	+	+	o	+	o	-	+	+
Dextrine	<chem>C6H10O5+H2O</chem>	18			20	+	+	+	+	+	+	+	+	+	+	+	+
Dextrine	<chem>C6H10O5+H2O</chem>	18			40	+	+	+	+	+	+	+	+	o	+	+	+
Dextrine	<chem>C6H10O5+H2O</chem>	18			60	+	+	+	+	+	+	+	+	o	+	+	+
Dextrine	<chem>C6H10O5+H2O</chem>	GL			20	+	+	+	+	+	+	+	+	+	+	+	+
Diacetone Alcohol	<chem>(CH3)2C(OH)CH2COCH3</chem>	TR		B	20	+	+	-	-	+	+	+	+	-	+	+	+
Diacetone Alcohol	<chem>(CH3)2C(OH)CH2COCH3</chem>	TR			40	+	+	-	-	+	+	+	+	-	+	+	+
Diacetone Alcohol	<chem>(CH3)2C(OH)CH2COCH3</chem>	TR			60	+	+	-	-	+	+	+	+	-	+	+	+
Diamide		See Hydrazine															
Dibromoethane		See Ethylene Bromide															
Dibutyl Ether	<chem>C8H18O</chem>	TR	0,77	All	20	+ <sup>1)</sup>	+	-	o	+	+	o	-	+	o	+	+
Dibutyl Ether	<chem>C8H18O</chem>	TR			40	+ <sup>1)</sup>	+	-	-	+	+	-	-	o	o	+	+
Dibutyl Ether	<chem>C8H18O</chem>	TR			60	+ <sup>1)</sup>	+	-	-	+	+	-	-	-	o	+	+
Dibutyl Phthalate	<chem>C8H4(CO2C4H9)2</chem>	TR	1,05		20	+	+	+	+	+	+	+	o	-	o	+	+
Dibutyl Phthalate	<chem>C8H4(CO2C4H9)2</chem>	TR			40	+ <sup>1)</sup>	+	+	o	+	+	+	-	-	-	+	+
Dibutyl Phthalate	<chem>C8H4(CO2C4H9)2</chem>	TR			60	+ <sup>1)</sup>	+	+	o	o	+	+	-	-	-	+	+
Dibutyl Sebacate	<chem>C18H34O4</chem>	TR	0,94		20	+ <sup>1)</sup>	+	-	+ <sup>1)</sup>	+	+	o	o	-	-	+	+
Dibutyl Sebacate	<chem>C18H34O4</chem>	TR			40	+ <sup>1)</sup>	+	-	+ <sup>1)</sup>	+	+	o	o	-	-	+	+
Dibutyl Sebacate	<chem>C18H34O4</chem>	TR			60	+ <sup>1)</sup>	+	-	+ <sup>1)</sup>	+	+	o	o	-	-	+	+
Dicaproic Acid		See Adipic Acid															
Dichloro Acetic Acid	<chem>CHCl2CO2H</chem>	TR	1,56		20	-	+	-	+ <sup>1)</sup>	+	+	-	o	-	+	+	+
Dichloro Acetic Acid	<chem>CHCl2CO2H</chem>	TR			40	-	o	-	+ <sup>1)</sup>	+	+	-	o	-	+	+	+

TR = technically pure, GL = saturated solution, H = commercial composition  
 + = resistant, o = limited resistance, - = not resistant, <sup>1)</sup> Not resistant on FMC



## Resistance Chart

Description	Chemical Formula	Concentration in %	Density [kg/dm <sup>3</sup> ]	Danger class (VbF)	Temperature [°C]	Stainless Steel 316 Ti	Hastelloy C	Aluminium alloy	PP	PVDF	ETFE	PPS	FKM	NBR	EPDM	PTFE/FEP	FFKM
Dichloro Acetic Acid	CHCl <sub>2</sub> CO <sub>2</sub> H	TR			60	-	○	-	○	+	+	-	-	-	○	+	+
Dichlorodifluorine-Methane	CF <sub>2</sub> Cl <sub>2</sub>	TR	1,32		20	+	+	-	-	+	+ <sup>1)</sup>	+	○	○	○	○	+
Dichloroethane																	
Dichloroethylene 1,1	C <sub>2</sub> H <sub>2</sub> Cl <sub>2</sub>	TR	1,22	AI	20	+ <sup>1)</sup>	+	-	○	+	+	-	+	+	-	+	+
Dichloroethylene 1,1	C <sub>2</sub> H <sub>2</sub> Cl <sub>2</sub>	TR			40	+ <sup>1)</sup>	+	-	○	+	+	-	+	+	-	+	+
Dichloroethylene 1,1	C <sub>2</sub> H <sub>2</sub> Cl <sub>2</sub>	TR			60	+ <sup>1)</sup>	+	-	○	+	+	-	+	+	-	+	+
Dichlormethane																	
Diesel Fuel		H		All	20	+	+	+	○	+	+	+	+	+	-	+	+
Diesel Fuel		H			40	+	+	+	○	+	+	+	+	+	-	+	+
Diesel Fuel		H			60	+	+	+	-	+	+	+	+	+	-	+	+
Diethanolamine	HN(CH <sub>2</sub> CH <sub>2</sub> OH) <sub>2</sub>		1,10		20	+	+	-	+	○	+	+	○	-	+	+	+
Diethanolamine	HN(CH <sub>2</sub> CH <sub>2</sub> OH) <sub>2</sub>				40	+ <sup>1)</sup>	+	-	+ <sup>1)</sup>	○	+	○	○	-	+	+	+
Diethanolamine	HN(CH <sub>2</sub> CH <sub>2</sub> OH) <sub>2</sub>				60	+ <sup>1)</sup>	+	-	+ <sup>1)</sup>	-	+	○	○	-	+	+	+
Diethyl Ether																	
Diethylamine	C <sub>4</sub> H <sub>11</sub> N	10	0,70	B	20	+ <sup>1)</sup>	+	+	+ <sup>1)</sup>	○	+	-	-	-	+	+	+
Diethylcellosolve																	
Diethylene Oxide																	
Diglycolic Acid	C <sub>4</sub> H <sub>6</sub> O <sub>6</sub>	30			20	+ <sup>1)</sup>	+	-	+ <sup>1)</sup>	+	+	-	+	○	+	+	+
Diglycolic Acid	C <sub>4</sub> H <sub>6</sub> O <sub>6</sub>	30			40	+ <sup>1)</sup>	+	-	+ <sup>1)</sup>	+	+	-	+	○	○	+	+
Diglycolic Acid	C <sub>4</sub> H <sub>6</sub> O <sub>6</sub>	30			60	+ <sup>1)</sup>	+	-	+ <sup>1)</sup>	+	+	-	+	○	○	+	+
Diglycolic Acid	C <sub>4</sub> H <sub>6</sub> O <sub>6</sub>	GL			20	+ <sup>1)</sup>	+	-	+ <sup>1)</sup>	+	+	-	+	○	+	+	+
Diisobutyl Ketone	C <sub>9</sub> H <sub>18</sub> O	TR			20	+	+	-	+	+	+	+	+	-	+	+	+
Diisobutyl Ketone	C <sub>9</sub> H <sub>18</sub> O	TR			40	+	+	-	+	+	+	+	+	-	-	+	+
Diisobutyl Ketone	C <sub>9</sub> H <sub>18</sub> O	TR			60	+	+	-	+	+	+	+	+	-	-	+	+
Diisopropyl Ether																	
Dimethyl Benzene																	
Dimethyl Formamide (DMF)	C <sub>3</sub> H <sub>7</sub> NO	TR	0,95		20	+	+	-	+	-	+	+	-	○	+	+	+
Dimethyl Formamide (DMF)	C <sub>3</sub> H <sub>7</sub> NO	TR			40	+	+	-	+	-	+	+	-	-	+	+	+
Dimethyl Formamide (DMF)	C <sub>3</sub> H <sub>7</sub> NO	TR			60	+	+	-	+	-	+	+	-	-	+	+	+
Dimethyl Phtalate (DMP)	C <sub>6</sub> H <sub>4</sub> (COOCH <sub>3</sub> ) <sub>2</sub>	TR			20	+	+	-	+	+	+	+	-	-	-	+	+
Dimethyl Phtalate (DMP)	C <sub>6</sub> H <sub>4</sub> (COOCH <sub>3</sub> ) <sub>2</sub>	TR			40	+	+	-	+	+	+	+	-	-	-	+	+
Dimethyl Phtalate (DMP)	C <sub>6</sub> H <sub>4</sub> (COOCH <sub>3</sub> ) <sub>2</sub>	TR			60	+	+	-	+	+	+	+	-	-	-	+	+
Dimethylamine	(CH <sub>3</sub> ) <sub>2</sub> NH	TR	0,73		20	+	+	-	+	○	+	+	○	-	○	+	+
Dinonyl Phtalate	C <sub>26</sub> H <sub>42</sub> O <sub>4</sub>	TR			20	+	+	-	+	+	+	+	-	-	-	+	+
Dinonyl Phtalate	C <sub>26</sub> H <sub>42</sub> O <sub>4</sub>	TR			30	+	+	-	+	+	+	+	-	-	-	+	+
Diocyl Phtalate	C <sub>24</sub> H <sub>38</sub> O <sub>4</sub>	TR			20	+	+	-	○	+	+	+	+	-	-	+	+
Diocyl Phtalate	C <sub>24</sub> H <sub>38</sub> O <sub>4</sub>	TR			40	+	+	-	○	+	+	+	+	-	-	+	+
Diocyl Phtalate	C <sub>24</sub> H <sub>38</sub> O <sub>4</sub>	TR			60	+	+	-	○	○	+	+	+	-	-	+	+
Dioxane	C <sub>4</sub> H <sub>8</sub> O <sub>2</sub>	TR	1,03	B	20	+	+	+	-	+	+	+	-	○	+	+	+
Dioxane	C <sub>4</sub> H <sub>8</sub> O <sub>2</sub>	TR			40	+	+	+	-	○	+	+	-	-	+	+	+
Dioxane	C <sub>4</sub> H <sub>8</sub> O <sub>2</sub>	TR			60	+ <sup>1)</sup>	+	+	-	-	+	○	-	-	+	+	+
DMF																	
DMP																	
Eau de Javel																	
Epichlorhydrine	H <sub>2</sub> C-O-CH-CH <sub>2</sub> Cl			All	20	○	+	-	+	+	+	+	-	-	-	+	+
Epichlorhydrine	H <sub>2</sub> C-O-CH-CH <sub>2</sub> Cl				40	○	+	-	+	+	+	+	-	-	-	+	+
Epichlorhydrine	H <sub>2</sub> C-O-CH-CH <sub>2</sub> Cl				60	○	+	-	+	+	+	+	-	-	-	+	+
Essential Oils						20	+	+	+	+	+	+	+	+	-	-	+
Essential Oils						40	+	+	+	+	+	+	+	○	-	-	+
Essential Oils						60	+	+	+	+	+	+	+	-	-	-	+

TR = technically pure, GL = saturated solution, H = commercial composition  
+ = resistant, ○ = limited resistance, - = not resistant, <sup>1)</sup> Not resistant on FMC



## Resistance Chart

**TR** = technically pure, **GL** = saturated solution, **H** = commercial composition  
 + = resistant, **o** = limited resistance, - = not resistant. <sup>1)</sup> Not resistant on FMC



## Resistance Chart

Description	Chemical Formula	Concentration in %	Density [kg/dm³]	Danger class (VbF)	Temperature [°C]	Stainless Steel 316 Ti	Hastelloy C	Aluminium alloy	PP	PVDF	ETFE	PPS	FKM	NBR	EPDM	PTFE/FEP	FFKM
Ferrochloride	$\text{FeCl}_2 + \text{H}_2\text{O}$	10			60	o	o	-	+	+	+	+	+	+	+	+	+
Ferrochloride	$\text{FeCl}_2 + \text{H}_2\text{O}$	50			20	+	+	-	+	+	+	+	+	+	+	+	+
Ferrochloride	$\text{FeCl}_2 + \text{H}_2\text{O}$	50			40	o	+	-	+	+	+	+	+	+	+	+	+
Ferrochloride	$\text{FeCl}_2 + \text{H}_2\text{O}$	50			60	o	+	-	+	+	+	+	+	+	+	+	+
Ferrocyanide of Potassium		See Potassium Ferrocyanide															
Ferro-Gallic-Inc		See Ink															
Ferrosulphate	$\text{FeSO}_4$	20	1,21		20	+ <sup>1)</sup>	+	+	+ <sup>1)</sup>	+	+	o	+	+	+	+	+
Ferrosulphate	$\text{FeSO}_4$	20			40	+ <sup>1)</sup>	+	+	+ <sup>1)</sup>	+	+	o	+	+	+	+	+
Ferrosulphate	$\text{FeSO}_4$	20			60	+ <sup>1)</sup>	+	+	+ <sup>1)</sup>	+	+	-	+	+	+	+	+
Ferrous Nitrate	$\text{Fe}(\text{NO}_3)_2$	TR			20	+	+	-	+	+	+	+	+	+	+	+	+
Ferrous Nitrate	$\text{Fe}(\text{NO}_3)_2$	TR			40	+	+	-	+	+	+	+	+	+	+	+	+
Ferrous Nitrate	$\text{Fe}(\text{NO}_3)_2$	TR			60	+	+	-	+	+	+	+	+	+	+	+	+
Finger Nail Polish Remover		See Acetone															
Flourammon		See Ammonium Fluoride															
Formaldehyde	$\text{CH}_2\text{O} + \text{H}_2\text{O}$	10			20	+	+	-	+	+	+	+	+	+	+	+	+
Formaldehyde	$\text{CH}_2\text{O} + \text{H}_2\text{O}$	10			40	+	+	-	+	+	+	+	+	o	+	+	+
Formaldehyde	$\text{CH}_2\text{O} + \text{H}_2\text{O}$	10			60	+	+	-	+	+	+	+	+	-	+	+	+
Formaldehyde	$\text{CH}_2\text{O} + \text{H}_2\text{O}$	35	1,10	All	20	+	+	-	+	+	+	+	+	-	+	+	+
Formaldehyde	$\text{CH}_2\text{O} + \text{H}_2\text{O}$	40		All	20	+	+	-	+	+	+	+	+	o	+	+	+
Formalin		See Formaldehyde															
Formamide	$\text{HCONH}_2$	100			20	+	+	+	+	+	+	+	o	+	+	+	+
Formamide	$\text{HCONH}_2$	100			40	+	+	+	+	+	+	+	-	o	+	+	+
Formamide	$\text{HCONH}_2$	100			60	+	+	+	+	+	+	+	-	-	+	+	+
Formic Acid	$\text{HCOOH}$	50			20	+	+	-	+	+	+	+	-	+	+	+	+
Formic Acid	$\text{HCOOH}$	50			40	+	+	-	o	+	+	+	+	-	o	+	+
Formic Acid	$\text{HCOOH}$	50			60	o	+	-	-	+	+	+	o	-	o	+	+
Formic Acid	$\text{HCOOH}$	85	1,22	All	20	+	+	-	+	+	+	+	-	-	+	+	+
Formic Acid	$\text{HCOOH}$	85		All	40	o	+	-	o	+	+	+	-	-	+	+	+
Formic Acid	$\text{HCOOH}$	85		All	60	o	+	-	-	+	+	+	-	-	+	+	+
Freon 12		See Dichlorodiflourine-Methane															
Fruit Juice		H			20	+	+	o	+	+	+	+	+	+	+	+	+
Fruit Juice		H			40	+	+	o	+	+	+	+	+	+	+	+	+
Fruit Juice		H			60	+	+	o	+	+	+	+	+	+	+	+	+
Fuel Oil		H		All	20	+	+	+	+	+	+	+	+	+	+	+	+
Fuel Oil		H			40	+	+	+	o	+	+	+	+	+	o	+	+
Fuel Oil		H			60	+	+	+	o	+	+	+	+	+	-	+	+
Furfuryl Alcohol	$\text{C}_5\text{H}_6\text{O}_2$	TR	1,13	All	20	+	+	+	+	+	+	+	o	-	+	+	+
Furfuryl Alcohol	$\text{C}_5\text{H}_6\text{O}_2$	TR			40	+	+	+	o	+	+	+	-	-	+	+	+
Furfuryl Alcohol	$\text{C}_5\text{H}_6\text{O}_2$	TR			60	+	+	+	o	o	+	+	-	-	+	+	+
Gallic Acid	$\text{C}_6\text{H}_2(\text{OH})_3\text{CO}_2\text{H}$	50			20	+ <sup>1)</sup>	+	-	+ <sup>1)</sup>	+	+	-	+	+	+	+	+
Gallotannic Acid		See Tannic Acid															
Glacial Acetic Acid		See Acetic Acid 100 %															
Glauber's Salt		See Sodium Sulphate															
Gluconic Acid	$\text{C}_6\text{H}_{12}\text{O}_7$				20	+	+	-	+	+	+	+	+	+	+	+	+
Gluconic Acid	$\text{C}_6\text{H}_{12}\text{O}_7$				40	+	+	-	+	+	+	+	+	+	+	+	+
Gluconic Acid	$\text{C}_6\text{H}_{12}\text{O}_7$				60	+	+	-	+	+	+	+	+	o	+	+	+
Glucose		See Glucose solution															
Glucose Solution	$\text{C}_6\text{H}_{12}\text{O}_6$	GL	1,13		20	+	+	+	+	+	+	+	+	+	+	+	+
Glucose Solution	$\text{C}_6\text{H}_{12}\text{O}_6$	GL			40	+	+	+	+	+	+	+	+	+	+	+	+
Glucose Solution	$\text{C}_6\text{H}_{12}\text{O}_6$	GL			60	+	+	+	+	+	+	+	+	+	+	+	+

TR = technically pure, GL = saturated solution, H = commercial composition  
 + = resistant, o = limited resistance, - = not resistant, <sup>1)</sup> Not resistant on FMC



## Resistance Chart

Description	Chemical Formula	Concentration in %	Density [kg/dm³]	Danger class (VbF)	Temperature [°C]	Stainless Steel 316 Ti	Hastelloy C	Aluminium alloy	PP	PVDF	ETFE	PPS	FKM	NBR	EPDM	PTFE/FEP	FFKM	
Glycerine	C <sub>3</sub> H <sub>8</sub> O <sub>3</sub>	TR	1,26		20	+	+	+	+	+	+	+	+	o	+	+	+	
Glycerine	C <sub>3</sub> H <sub>8</sub> O <sub>3</sub>	TR			40	+	+	+	+	+	+	+	+	o	+	+	+	
Glycerine	C <sub>3</sub> H <sub>8</sub> O <sub>3</sub>	TR			60	+	+	+	+	+	+	+	+	o	+	+	+	
Glycol					See Ethylene Glycol													
Glycolic Acid	C <sub>2</sub> H <sub>4</sub> O <sub>3</sub>	37			20	+	+	-	+	+	+	+	+	+	+	+	+	
Glycolic Acid	C <sub>2</sub> H <sub>4</sub> O <sub>3</sub>	70			20	+	+	-	+	+	+	+	+	-	+	+	+	
Glycolic Acid	C <sub>2</sub> H <sub>4</sub> O <sub>3</sub>	70			40	+	+	-	o	o	+	+	o	-	o	+	+	
Glycolic Acid	C <sub>2</sub> H <sub>4</sub> O <sub>3</sub>	70			60	+	+	-	-	o	+	+	o	-	-	+	+	
Glycose					See Glycerine													
Heptane	C <sub>7</sub> H <sub>16</sub>	TR	0,68	AI	20	+	+	+	+	+	+	+	+	+	-	+	+	
Heptane	C <sub>7</sub> H <sub>16</sub>	TR			40	+	+	+	+	+	+	+	+	+	+	-	+	+
Heptane	C <sub>7</sub> H <sub>16</sub>	TR			60	+	+	+	o	+	+	+	+	+	-	+	+	
Hexahydrobenzene					See Cyclohexane													
Hexalin					See Cyclohexanol													
Hexamethylenetetramine	(CH <sub>2</sub> ) <sub>6</sub> N <sub>4</sub>	10			20	+	+	+	-	+	+	+	o	-	-	+	+	
Hexamethylenetetramine	(CH <sub>2</sub> ) <sub>6</sub> N <sub>4</sub>	10			40	+	+	+	-	+	+	+	-	-	-	+	+	
Hexamethylenetetramine	(CH <sub>2</sub> ) <sub>6</sub> N <sub>4</sub>	10			60	+	+	+	-	o	+	+	-	-	-	+	+	
Hexamine					See Hexamethylenetetramine													
Hexane	C <sub>6</sub> H <sub>14</sub>	TR		AI	20	+	+	+	+	+	+	+	+	+	+	-	+	+
Hexane	C <sub>6</sub> H <sub>14</sub>	TR			40	+	+	+	+	+	+	+	+	+	+	-	+	+
Hexane	C <sub>6</sub> H <sub>14</sub>	TR			60	+	+	+	o	+	+	+	+	+	-	+	+	
Hexanedioic Acid					See Adipic Acid													
Hexanol	C <sub>6</sub> H <sub>13</sub> OH		0,82	All	20	+	+	-	+	+	+	+	+	-	+	+	+	
Hexylalcohol					See Hexanol													
Hydrazine	H <sub>2</sub> N-NH <sub>2</sub>	TR	1,08	B	20	+ <sup>1)</sup>	+	-	+ <sup>1)</sup>	+	+	-	+	+	+	+	+	
Hydrazine	H <sub>2</sub> N-NH <sub>2</sub>	TR			40	o	+	-	o	+	+	-	+	o	o	+	+	
Hydrazine	H <sub>2</sub> N-NH <sub>2</sub>	TR			60	-	o	-	-	+	+	-	o	-	-	+	+	
Hydriodic Acid	HJ	TR			20	o	o	-	+ <sup>1)</sup>	+	+	-	+	+	+	+	+	
Hydriodic Acid	HJ	TR			40	o	o	-	+ <sup>1)</sup>	+	+	-	+	o	+	+	+	
Hydriodic Acid	HJ	TR			60	-	o	-	+ <sup>1)</sup>	+	+	-	+	o	+	+	+	
Hydrobromic Acid	HBr + H <sub>2</sub> O	10	1,07		20	-	o	-	+ <sup>1)</sup>	+	+	o	+	-	+	+	+	
Hydrobromic Acid	HBr + H <sub>2</sub> O	10			40	-	o	-	+ <sup>1)</sup>	+	+	o	+	-	+	+	+	
Hydrobromic Acid	HBr + H <sub>2</sub> O	10			60	-	-	-	+ <sup>1)</sup>	+	+	o	+	-	o	+	+	
Hydrobromic Acid	HBr + H <sub>2</sub> O	48	1,44		20	-	o	-	+ <sup>1)</sup>	+	+	o	+	-	o	+	+	
Hydrobromic Acid	HBr + H <sub>2</sub> O	48			40	-	o	-	+ <sup>1)</sup>	+	+	o	+	-	+	+	+	
Hydrobromic Acid	HBr + H <sub>2</sub> O	48			60	-	-	-	+ <sup>1)</sup>	+	+	o	+	-	o	+	+	
Hydrochloric Acid	HCl	10	1,05		20	-	+	-	+	+	+	+	+	+	+	+	+	
Hydrochloric Acid	HCl	10			40	-	o	-	+	+	+	+	+	o	+	+	+	
Hydrochloric Acid	HCl	10			60	-	o	-	+	+	+	+	+	-	+	+	+	
Hydrochloric Acid	HCl	30	1,15		20	-	+	-	+	+	+	+	+	-	+	+	+	
Hydrochloric Acid	HCl	30			40	-	o	-	+	+	+	+	+	-	o	+	+	
Hydrochloric Acid	HCl	30			60	-	o	-	+	+	+	+	+	o	-	o	+	
Hydrochloric Acid	HCl	conc.	1,20		20	-	+	-	+	+	+	+	+	-	+	+	+	
Hydrochloric Acid	HCl	conc.			40	-	o	-	+	+	+	+	+	-	o	+	+	
Hydrochloric Acid	HCl	conc.			60	-	o	-	o	+	+	o	o	-	o	+	+	
Hydrocyanic Acid	HCN	TR	0,69		20	+	+	-	+	+	+	+	+	o	+	+	+	
Hydrocyanic Acid	HCN	GL			20	+	+	-	+	+	+	+	o	-	o	+	+	
Hydrocyanic Acid	HCN	GL			40	+ <sup>1)</sup>	+	-	+ <sup>1)</sup>	+	+	o	o	-	o	+	+	
Hydrocyanic Acid	HCN	GL			60	o	+	-	+ <sup>1)</sup>	+	+	o	o	-	o	+	+	
Hydrofluoric Acid	HF	40	1,06		20	-	o	-	+ <sup>1)</sup>	+	+	-	+	-	o	+	+	

TR = technically pure, GL = saturated solution, H = commercial composition  
 + = resistant, o = limited resistance, - = not resistant, <sup>1)</sup> Not resistant on FMC



## Resistance Chart

Description	Chemical Formula	Concentration in %	Density [kg/dm³]	Danger class (VbF)	Temperature [°C]	Stainless Steel 316 Ti	Hastelloy C	Aluminium alloy	PP	PVDF	ETFE	PPS	FKM	NBR	EPDM	PTFE/FEP	FFKM	
Hydrofluoric Acid	HF	40			40	-	o	-	+ <sup>1)</sup>	+	+	-	+	-	-	+	+	
Hydrofluoric Acid	HF	40			60	-	o	-	o	+	+	-	o	-	-	+	+	
Hydrofluoric Acid	HF	60			20	-	o	-	+	+	+	-	+	-	o	+	+	
Hydrofluoric Acid	HF	70	1,23		20	-	o	-	o	+	+	-	o	-	o	+	+	
Hydrofluoric Acid	HF	70			40	-	o	-	o	+	+	-	o	-	-	+	+	
Hydrofluoric Acid	HF	70			60	-	o	-	o	o	+	-	o	-	-	+	+	
Hydrofluosilic Acid	H <sub>2</sub> SiF <sub>6</sub>	32	1,17		20	-	+	-	+ <sup>1)</sup>	+	+	-	+	o	+	+	+	
Hydrofluosilic Acid	H <sub>2</sub> SiF <sub>6</sub>	32			40	-	o	-	+ <sup>1)</sup>	+	+	-	+	-	o	+	+	
Hydrofluosilic Acid	H <sub>2</sub> SiF <sub>6</sub>	32			60	-	o	-	+ <sup>1)</sup>	+	+	-	+	-	o	+	+	
Hydrogen Fluoride					See Hydrofluoric Acid													
Hydrogen Peroxide	H <sub>2</sub> O <sub>2</sub>	3	1,01		20	+	+	+	+	+	+	+	o	+	+	+	+	
Hydrogen Peroxide	H <sub>2</sub> O <sub>2</sub>	3			40	+	+	+	+	+	+	+	o	-	+	+	+	
Hydrogen Peroxide	H <sub>2</sub> O <sub>2</sub>	3			60	+	+	+	+	+	+	+	o	-	o	+	+	
Hydrogen Peroxide	H <sub>2</sub> O <sub>2</sub>	10	1,04		20	+	+	+	+	+	+	+	o	+	+	+	+	
Hydrogen Peroxide	H <sub>2</sub> O <sub>2</sub>	10			40	+	+	+	+	+	+	+	o	-	o	+	+	
Hydrogen Peroxide	H <sub>2</sub> O <sub>2</sub>	10			60	+	+	+	+	+	+	+	o	-	o	+	+	
Hydrogen Peroxide	H <sub>2</sub> O <sub>2</sub>	20	1,07		20	+ <sup>1)</sup>	+	+	+ <sup>1)</sup>	+	+	o	+	o	+	+	+	
Hydrogen Peroxide	H <sub>2</sub> O <sub>2</sub>	20			40	+ <sup>1)</sup>	+	+	+ <sup>1)</sup>	+	+	o	o	-	o	+	+	
Hydrogen Peroxide	H <sub>2</sub> O <sub>2</sub>	20			60	+ <sup>1)</sup>	+	+	o	+	+	o	o	-	-	+	+	
Hydrogen Peroxide	H <sub>2</sub> O <sub>2</sub>	30	1,11		20	+ <sup>1)</sup>	+	+	+ <sup>1)</sup>	+	+	o	+	-	+	+	+	
Hydrogen Peroxide	H <sub>2</sub> O <sub>2</sub>	30			40	+ <sup>1)</sup>	+	+	+ <sup>1)</sup>	+	+	o	o	-	o	+	+	
Hydrogen Peroxide	H <sub>2</sub> O <sub>2</sub>	30			60	+ <sup>1)</sup>	+	+	o	+	+	o	o	-	-	+	+	
Hydrogen Peroxide	H <sub>2</sub> O <sub>2</sub>	90	1,42		20	+ <sup>1)</sup>	+	+	-	+	+	-	+	-	+	+	+	
Hydrogen Peroxide	H <sub>2</sub> O <sub>2</sub>	90			40	+ <sup>1)</sup>	+	+	-	o	+	-	o	-	o	+	+	
Hydrogen Peroxide	H <sub>2</sub> O <sub>2</sub>	90			60	+ <sup>1)</sup>	+	+	-	o	+	-	o	-	o	+	+	
Hydroxy Acetic Acid					See Glycolic Acid													
Hydroxybenzene					See Phenol													
Hydroxysuccinic Acid	HOOC-CH <sub>2</sub> -CHOH-COOH	50			20	+ <sup>1)</sup>	+	-	+ <sup>1)</sup>	+	+	o	+	+	+	+	+	
Hydroxysuccinic Acid	HOOC-CH <sub>2</sub> -CHOH-COOH	50			40	+ <sup>1)</sup>	+	-	+ <sup>1)</sup>	+	+	o	+	+	+	+	+	
Hydroxysuccinic Acid	HOOC-CH <sub>2</sub> -CHOH-COOH	50			60	+ <sup>1)</sup>	+	-	+ <sup>1)</sup>	+	+	o	+	+	+	+	+	
Ink		H	1,00		20	+	+	+	+	+	+	+	+	+	+	+	+	
Iodine Preparations		H			20	o	+	o	+	+	+	+	+	+	+	+	o	
Iodine Preparations		H			40	o	+	o	+	+	+	+	+	+	+	+	o	
Iodine Preparations		H			60	o	+	o	+	+	+	+	+	+	+	+	o	
Iodoform					See Triiodine Methane													
Iron Vitriol					See Ferrosulphate													
Isobutanol					See Isobutyl Alcohol													
Isobutyl Alcohol	C <sub>4</sub> H <sub>10</sub> O	100	0,81	All	20	+	+	+	+	+	+	+	+	-	+	+	+	
Isobutyl Alcohol	C <sub>4</sub> H <sub>10</sub> O	100			40	+	+	+	+	+	+	+	+	-	+	+	+	
Isobutyl Alcohol	C <sub>4</sub> H <sub>10</sub> O	100			60	+	+	+	+	+	+	+	+	-	+	+	+	
Isocyanate					20	+	+	+	-	-	+	o	+	+	-	+	+	
Isooctane	C <sub>8</sub> H <sub>18</sub>	TR		AI	20	+	+	+	+	+	+	+	+	+	+	+	+	
Isooctanol	C <sub>8</sub> H <sub>18</sub> -CH(C <sub>2</sub> H <sub>5</sub> )	TR	0,83	All	20	+	+	+	+	+	+	+	+	o	+	+	+	
Isopropanol					See Propanol													
Isopropyl Acetate	C <sub>5</sub> H <sub>10</sub> O <sub>2</sub>		0,87	AI	20	+ <sup>1)</sup>	+	o	o	+	+	o	-	+	+	+	+	
Isopropyl Ether	C <sub>3</sub> H <sub>8</sub> O	TR	0,73	AI	20	+ <sup>1)</sup>	+	o	o	+	+	-	-	-	-	+	+	
Isopropyl Ether	C <sub>3</sub> H <sub>8</sub> O	TR			40	+ <sup>1)</sup>	+	o	o	o	+	-	-	-	-	+	+	
Isopropyl Ether	C <sub>3</sub> H <sub>8</sub> O	TR			60	+ <sup>1)</sup>	+	o	o	o	+	-	-	-	-	+	+	
Kerosene					See Naphtha													
Kerosine					See Naphtha													



## Resistance Chart

Description	Chemical Formula	Concentration in %	Density [kg/dm³]	Danger class (VbF)	Temperature [°C]	Stainless Steel 316 Ti	Hastelloy C	Aluminium alloy	PP	PVDF	ETFE	PPS	FKM	NBR	EPDM	PTFE/FEP	FFKM
Lactic Acid	C <sub>3</sub> H <sub>6</sub> O <sub>3</sub>	10			20	+	+	-	+	+	+	+	+	o	+	+	+
Lactic Acid	C <sub>3</sub> H <sub>6</sub> O <sub>3</sub>	10			40	+	+	-	+	+	+	+	+	-	+	+	+
Lactic Acid	C <sub>3</sub> H <sub>6</sub> O <sub>3</sub>	10			60	+	+	-	+	+	+	+	+	-	+	+	+
Lactic Acid	C <sub>3</sub> H <sub>6</sub> O <sub>3</sub>	90			20	+	+	-	+	+	+	+	+	-	+	+	+
Lactic Acid	C <sub>3</sub> H <sub>6</sub> O <sub>3</sub>	90			40	o	+	-	+	o	+	+	+	-	+	+	+
Lactic Acid	C <sub>3</sub> H <sub>6</sub> O <sub>3</sub>	90			60	o	+	-	+	o	+	+	+	-	o	+	+
Lanolin		TR			20	+	+	+	o	+	+	+	+	+	o	+	+
Lanolin		TR			40	+	+	+	-	+	+	+	+	+	-	+	+
Lanolin		TR			60	+	+	+	-	+	+	+	+	o	-	+	+
Lauric Acid	C <sub>12</sub> H <sub>24</sub> O <sub>2</sub>	TR			20	+ <sup>1)</sup>	+	-	+ <sup>1)</sup>	+	+	-	+	-	-	+	+
Lauric Acid	C <sub>12</sub> H <sub>24</sub> O <sub>2</sub>	TR			40	+ <sup>1)</sup>	+	-	+ <sup>1)</sup>	+	+	-	+	-	-	+	+
Lauric Acid	C <sub>12</sub> H <sub>24</sub> O <sub>2</sub>	TR			60	+ <sup>1)</sup>	+	-	+ <sup>1)</sup>	+	+	-	+	-	-	+	+
Lead Acetate	C <sub>4</sub> H <sub>6</sub> O <sub>4</sub> Pb	10			20	+	+	-	+	+	+	+	+	+	+	+	+
Lead Acetate	C <sub>4</sub> H <sub>6</sub> O <sub>4</sub> Pb	10			40	+	+	-	+	+	+	+	+	+	+	+	+
Lead Acetate	C <sub>4</sub> H <sub>6</sub> O <sub>4</sub> Pb	10			60	+	+	-	+	+	+	+	+	+	+	+	+
Lead Acetate	C <sub>4</sub> H <sub>6</sub> O <sub>4</sub> Pb	GL			20	+	+	-	+	+	+	+	+	+	+	+	+
Lead Acetate	C <sub>4</sub> H <sub>6</sub> O <sub>4</sub> Pb	GL			40	+	+	-	+	+	+	+	+	+	+	+	+
Lead Acetate	C <sub>4</sub> H <sub>6</sub> O <sub>4</sub> Pb	GL			60	+	+	-	+	+	+	+	+	+	+	+	+
Lead Nitrate	Pb(NO <sub>3</sub> ) <sub>2</sub>	50			20	+	+	+	+	+	+	+	+	+	+	+	+
Lead Sugar					See Lead Acetate												
Lead Tetraethyl	Pb(C <sub>2</sub> H <sub>5</sub> ) <sub>4</sub>	TR	1,66	AIII	20	+	+	+	+	+	+	+	+	o	+	+	+
Linseed Oil		TR			20	+	+	+	+	+	+	+	+	+	+	+	+
Linseed Oil		TR			40	+	+	+	+	+	+	+	+	o	+	+	+
Linseed Oil		TR			60	+	+	+	o	+	+	+	+	+	-	+	+
Lithium Chloride	LiCl	45	1,30		20	o	+	-	+	+	+	+	+	+	+	+	+
Lithium Chloride	LiCl	45			40	o	+	-	+	+	+	+	+	+	+	+	+
Lithium Chloride	LiCl	45			60	-	o	-	+	+	+	+	+	+	+	+	+
Lithium Sulphate	LiSO <sub>4</sub>	25	1,23		20	+	+	+	+	+	+	+	+	+	+	+	+
Lithium Sulphate	LiSO <sub>4</sub>	25			40	+	+	+	+	+	+	+	+	+	+	+	+
Lithium Sulphate	LiSO <sub>4</sub>	25			60	+	+	+	+	+	+	+	+	+	+	+	+
Lunar Caustic					See Silver Nitrate												
Magnesium Chloride	MgCl <sub>2</sub>	10			20	o	+	-	+	+	+	+	+	+	+	+	+
Magnesium Chloride	MgCl <sub>2</sub>	10			40	o	+	-	+	+	+	+	+	+	+	+	+
Magnesium Chloride	MgCl <sub>2</sub>	10			60	o	+	-	+	+	+	+	+	+	+	+	+
Magnesium Chloride	MgCl <sub>2</sub>	GL			20	o	+	-	+	+	+	+	+	+	+	+	+
Magnesium Chloride	MgCl <sub>2</sub>	GL			40	o	+	-	+	+	+	+	+	+	+	+	+
Magnesium Chloride	MgCl <sub>2</sub>	GL			60	o	+	-	+	+	+	+	+	+	+	+	+
Magnesium Nitrate	Mg(NO <sub>3</sub> ) <sub>2</sub>	25	1,21		20	+	+	+	+	+	+	+	+	+	+	+	+
Magnesium Nitrate	Mg(NO <sub>3</sub> ) <sub>2</sub>	25			40	+	+	+	+	+	+	+	+	+	+	+	+
Magnesium Nitrate	Mg(NO <sub>3</sub> ) <sub>2</sub>	25			60	+	+	+	+	+	+	+	+	+	+	+	+
Magnesium Sulphate	MgSO <sub>4</sub>	10			20	+	+	+	+	+	+	+	+	+	+	+	+
Magnesium Sulphate	MgSO <sub>4</sub>	10			40	+	+	+	+	+	+	+	+	+	+	+	+
Magnesium Sulphate	MgSO <sub>4</sub>	10			60	+	+	+	+	+	+	+	+	+	+	+	+
Magnesium Sulphate	MgSO <sub>4</sub>	GL	1,28		20	+	+	+	+	+	+	+	+	+	+	+	+
Magnesium Sulphate	MgSO <sub>4</sub>	GL			40	+	+	+	+	+	+	+	+	+	+	+	+
Magnesium Sulphate	MgSO <sub>4</sub>	GL			60	+	+	+	+	+	+	+	+	+	+	+	+
Maleic Acid	C <sub>4</sub> H <sub>4</sub> O <sub>4</sub>	35			20	+	+	-	+	+	+	+	+	-	+	+	+
Maleic Acid	C <sub>4</sub> H <sub>4</sub> O <sub>4</sub>	35			40	+	+	-	+	+	+	+	+	-	+	+	+
Maleic Acid	C <sub>4</sub> H <sub>4</sub> O <sub>4</sub>	GL			20	+	+	-	+	+	+	+	+	-	o	+	+
Maleic Acid	C <sub>4</sub> H <sub>4</sub> O <sub>4</sub>	GL			40	+	+	-	+	+	+	+	+	-	-	+	+

TR = technically pure, GL = saturated solution, H = commercial composition  
 + = resistant, o = limited resistance, - = not resistant, <sup>1)</sup> Not resistant on FMC



## Resistance Chart

Description	Chemical Formula	Concentration in %	Density [kg/dm³]	Danger class (VbF)	Temperature [°C]	Stainless Steel 316 Ti	Hastelloy C	Aluminium alloy	PP	PVDF	ETFE	PPS	FKM	NBR	EPDM	PTFE/FEP	FFKM
Maleic Acid	C <sub>4</sub> H <sub>4</sub> O <sub>4</sub>	GL			60	+	+	-	+	+	+	+	+	-	-	+	+
Malic Acid					See Hydrosuccinic Acid												
Manganous Chloride	MnCl <sub>2</sub>	20	1,19		20	o	+	-	+	+	+	+	+	+	+	+	+
Manganous Chloride	MnCl <sub>2</sub>	20			40	o	+	-	+	+	+	+	+	+	+	+	+
Manganous Chloride	MnCl <sub>2</sub>	20			60	-	o	-	+	+	+	+	+	o	+	+	+
Mercury Cyanide	Hg(CN) <sub>2</sub>	TR			20	+	+	-	+	+	+	+	+	+	+	+	+
Mercury Cyanide	Hg(CN) <sub>2</sub>	TR			40	+	+	-	+	+	+	+	+	+	+	+	+
Mercury Cyanide	Hg(CN) <sub>2</sub>	TR			60	+	+	-	+	+	+	+	+	o	+	+	+
Mercury Nitrate	Hg(NO <sub>3</sub> ) <sub>2</sub>	GL			20	+	+	-	+	+	+	+	+	o	+	+	+
Mercury Nitrate	Hg(NO <sub>3</sub> ) <sub>2</sub>	GL			40	+	+	-	+	+	+	+	+	o	+	+	+
Mercury Nitrate	Hg(NO <sub>3</sub> ) <sub>2</sub>	GL			60	+	+	-	+	+	+	+	+	-	+	+	+
Methanol	CH <sub>3</sub> OH	TR		B	20	+	+	+	+	+	+	+	o	o	+	+	+
Methanol	CH <sub>3</sub> OH	TR			40	+	+	+	+	+	+	+	o	o	+	+	+
Methanol	CH <sub>3</sub> OH	TR			60	+	+	o	+	+	+	+	o	-	o	+	+
Methyl Alcohol					See Methanol												
Methyl Benzene					See Toluene												
Methyl Cellosolve					See Methyl Glycol												
Methyl Cyanide					See Acetonitrile												
Methyl Ester					See Acetic Methyl Ester												
Methyl Ethyl Ketone (MEK)					See Butanone												
Methyl Glycol	(CH <sub>2</sub> ) <sub>2</sub> OHOCH <sub>3</sub>		0,98		20	+	+	+	+	+	+	+	+	+	+	+	+
Methyl Glycol	(CH <sub>2</sub> ) <sub>2</sub> OHOCH <sub>3</sub>				40	+	+	+	+	+	+	+	+	+	+	+	+
Methyl Glycol	(CH <sub>2</sub> ) <sub>2</sub> OHOCH <sub>3</sub>				60	+	+	+	+	+	+	+	+	+	+	+	+
Methyl Isobutyl Ketone (MIBK)	C <sub>6</sub> H <sub>11</sub> O			AI	20	+	+	-	-	+	+	+	o	o	o	+	+
Methyl Pentanon					See Methyl Isobutyl Ketone (MIBK)												
Methyl Sulphuric Acid	H <sub>2</sub> SO <sub>4</sub> -CH <sub>2</sub>	50			20	o	o	-	o	+	+	-	o	-	+	+	+
Methyl Sulphuric Acid	H <sub>2</sub> SO <sub>4</sub> -CH <sub>2</sub>	50			40	-	o	-	o	+	+	-	o	-	+	+	+
Methyl Sulphuric Acid	H <sub>2</sub> SO <sub>4</sub> -CH <sub>2</sub>	50			60	-	-	-	-	+	+	-	-	-	o	+	+
Methyl Sulphuric Acid	H <sub>2</sub> SO <sub>4</sub> -CH <sub>2</sub>	TR			20	o	o	-	-	+	+	-	o	-	+	+	+
Methyl Sulphuric Acid	H <sub>2</sub> SO <sub>4</sub> -CH <sub>2</sub>	TR			40	-	o	-	-	+	+	-	o	-	+	+	+
Methyl Sulphuric Acid	H <sub>2</sub> SO <sub>4</sub> -CH <sub>2</sub>	TR			60	-	o	-	-	+	+	-	-	-	o	+	+
Methylene Chloride	CH <sub>2</sub> Cl <sub>2</sub>		1,33		20	+	+	-	o	o	+ <sup>1)</sup>	+	o	-	o	+	+
Methylene Chloride	CH <sub>2</sub> Cl <sub>2</sub>				40	+	+	-	o	o	+ <sup>1)</sup>	+	o	-	-	+	+
Milk					20	+	+	+	+	+	+	+	+	+	+	+	+
Milk of Lime					See Calcium Hydroxyde												
Mineral Oils					20	+	+	+	+	+	+	+	+	+	+	-	+
Mineral Oils					40	+	+	+	+	+	+	+	+	+	+	-	+
Mineral Oils					60	+	+	+	o	+	+	+	+	+	+	-	+
Mineral Water					20	+	+	+	+	+	+	+	+	+	+	+	+
Mineral Water					40	+	+	+	+	+	+	+	+	+	+	+	+
Mineral Water					60	+	+	+	+	+	+	+	+	+	+	+	+
Mirbane					See Nitrobenzene												
Monochloracetic Acid					See Chlороacetic Acid												
Muriatic Acid					See Hydrochloric Acid												
Naphtha		TR	0,81	All	20	+ <sup>1)</sup>	+	+	+ <sup>1)</sup>	+	+	o	+	+	o	+	+
Naphtha		TR			40	+ <sup>1)</sup>	+	+	+ <sup>1)</sup>	+	+	o	+	+	-	+	+
Naphtha		TR			60	+ <sup>1)</sup>	+	+	+ <sup>1)</sup>	+	+	o	+	+	-	+	+
Naphthalic Acid					See Fatty Acids												
Nickel Chloride	NiCl <sub>2</sub>	20	1,22		20	o	+	-	+	+	+	+	+	+	+	+	+
Nickel Chloride	NiCl <sub>2</sub>	20			40	o	+	-	+	+	+	+	+	+	+	+	+

TR = technically pure, GL = saturated solution, H = commercial composition  
+ = resistant, o = limited resistance, - = not resistant, <sup>1)</sup> Not resistant on FMC



## Resistance Chart

Description	Chemical Formula	Concentration in %	Density [kg/dm³]	Danger class (VbF)	Temperature [C°]	Stainless Steel 316 Ti	Hastelloy C	Aluminium alloy	PP	PVDF	ETFE	PPS	FKM	NBR	EPDM	PTFE/FEP	FFKM	
Nickel Chloride	NiCl₂	20			60	o	+	-	+	+	+	+	+	o	+	+	+	
Nickel Nitrate	Ni(NO₃)₂	35	1,38		20	+	+	-	+	+	+	+	+	+	+	+	+	
Nickel Nitrate	Ni(NO₃)₂	35			40	+	+	-	+	+	+	+	+	+	+	+	+	
Nickel Nitrate	Ni(NO₃)₂	35			60	+	+	-	+	+	+	+	+	o	+	+	+	
Nickel Sulphate	NiSO₄	10	1,21		20	+	+	-	+	+	+	+	+	+	+	+	+	
Nickel Sulphate	NiSO₄	10			40	+	+	-	+	+	+	+	+	+	+	+	+	
Nickel Sulphate	NiSO₄	10			60	+	+	-	+	+	+	+	+	+	+	+	+	
Nicotine	C₁₀H₁₄N₂				20	+	+	-	-	-	+	+	+	o	+	+	+	
Nitric Acid	HNO₃	10	1,05		20	+ <sup>1)</sup>	+	-	+ <sup>1)</sup>	+	+	o	+	-	+	+	+	
Nitric Acid	HNO₃	10			40	+ <sup>1)</sup>	+	-	o	+	+	o	+	-	+	+	+	
Nitric Acid	HNO₃	10			60	+ <sup>1)</sup>	+	-	o	+	+	o	+	-	o	+	+	
Nitric Acid	HNO₃	30	1,18		20	+ <sup>1)</sup>	+	-	o	+	+	-	+	-	+	+	+	
Nitric Acid	HNO₃	30			40	+ <sup>1)</sup>	+	-	o	+	+	-	+	-	+	+	+	
Nitric Acid	HNO₃	30			60	o	+	-	-	+	+	-	+	-	o	+	+	
Nitric Acid	HNO₃	50	1,31		20	+ <sup>1)</sup>	+	-	o	+	+	-	+	-	-	+	+	
Nitric Acid	HNO₃	50			40	o	+	-	-	+	+	-	o	-	-	+	+	
Nitric Acid	HNO₃	50			60	o	o	-	-	+	+	-	o	-	-	+	+	
Nitric Acid	HNO₃	65	1,41		20	+ <sup>1)</sup>	+	-	-	+	+	-	o	-	-	+	+	
Nitric Acid	HNO₃	65			40	o	+	-	-	+	+	-	o	-	-	+	+	
Nitric Acid	HNO₃	65			60	o	o	-	-	+	+	-	o	-	-	+	+	
Nitrobenzene	C₆H₅NO₂	TR	1,21	AIII	20	+	+	+	+	+	+	o	o	o	o	+	+	
Nitrobenzene	C₆H₅NO₂	TR			40	+	+	+	o	+	+	o	o	-	+	+	+	
Nitrobenzene	C₆H₅NO₂	TR			60	+	+	+	o	+	+	o	-	-	+	+	+	
Nitrotoluene	C₆H₄CH₃NO₂	TR			20	+	+	+	+	+	+	o	o	o	o	+	+	
Nitrotoluene	C₆H₄CH₃NO₂	TR			40	+	+	+	+	+	+	o	o	-	+	+	+	
Nitrotoluene	C₆H₄CH₃NO₂	TR			60	+	+	+	o	+	+	o	o	-	+	+	+	
Nitrous Acid	HNO₂				20	o	+	-	o	+	+	+	+	-	o	+	+	
Nitrous Acid	HNO₂				40	o	+	-	o	+	+	+	+	-	o	+	+	
Nitrous Acid	HNO₂				60	o	+	-	+	+	+	+	+	-	+	+	+	
Octal					See Diethyl Phthalate													
Octane	C₈H₁₈	TR		AI	20	+	+	+	+	+	+	+	+	+	+	+	+	+
Oil					See Mineral Oils													
Oleic Acid	C₁₈H₃₄O₂	TR	0,90		20	+	+	-	+	+	+	+	+	o	-	+	+	
Oleic Acid	C₁₈H₃₄O₂	TR			40	+	+	-	+	+	+	+	o	o	-	+	+	
Oleic Acid	C₁₈H₃₄O₂	TR			60	+	+	-	o	+	+	+	o	-	-	+	+	
Oleum	H₂SO₄+SO₃				20	+ <sup>1)</sup>	+	-	-	-	+	-	+	-	-	+	+	
Oxalic Acid	(CO₂H)₂	10			20	+	+	-	+	+	+	+	+	+	+	+	+	
Oxalic Acid	(CO₂H)₂	10			40	+	+	-	o	+	+	+	+	+	+	+	+	
Oxalic Acid	(CO₂H)₂	10			60	+	+	-	o	+	+	+	+	+	+	+	+	
Oxalic Acid	(CO₂H)₂	GL	1,65		20	+ <sup>1)</sup>	+	-	+ <sup>1)</sup>	+	+	o	+	o	+	+	+	
Oxalic Acid	(CO₂H)₂	GL			40	+ <sup>1)</sup>	+	-	o	+	+	o	+	o	o	+	+	
Oxalic Acid	(CO₂H)₂	GL			60	+ <sup>1)</sup>	+	-	o	o	+	o	+	o	o	+	+	
Palatinol C					See Dibutyl Phthalate													
Paraffin Oil	CnH₂n	TR	0,93		20	+	+	+	+	+	+	+	+	+	+	+	-	+
Paraffin Oil	CnH₂n	TR			40	+	+	+	+	+	+	+	+	o	-	+	+	
Paraffin Oil	CnH₂n	TR			60	+	+	+	+	+	+	+	+	o	-	+	+	
Pectine		10			20	+	+	+	+	+	+	+	+	+	+	+	+	
Pentanol, 1-Pentanol					See Amyl Alcohol													
Pentyl Acetate					See Amyl Acetate													
Pentyl Chloride					See Amyl Chloride													

TR = technically pure, GL = saturated solution, H = commercial composition  
 + = resistant, o = limited resistance, - = not resistant, <sup>1)</sup> Not resistant on FMC



## Resistance Chart

Description	Chemical Formula	Concentration in %	Density [kg/dm³]	Danger class (VbF)	Temperature [°C]	Stainless Steel 316 Ti	Hastelloy C	Aluminium alloy	PP	PVDF	ETFE	PPS	FKM	NBR	EPDM	PTFE/FEP	FFKM
Peracetic Acid		TR			20	+	-	-	-	+	+	-	-	-	-	+	-
Peracetic Acid		TR			40	+	-	-	-	+	+	-	-	-	-	+	-
Peracetic Acid		TR			60	+	-	-	-	+	+	-	-	-	-	+	-
Perchloric Acid	HClO <sub>4</sub>	20			20	+	+	-	+	+	+	+	+	-	+	+	+
Perchloric Acid	HClO <sub>4</sub>	20			40	+	+	-	+	+	+	+	+	-	+	+	+
Perchloric Acid	HClO <sub>4</sub>	20			60	+	+	-	+	+	+	+	o	-	o	+	+
Perchloric Acid	HClO <sub>4</sub>	50	1,40		20	+	+	-	+	+	+	+	+	-	+	+	+
Perchloric Acid	HClO <sub>4</sub>	50			40	+	+	-	+	+	+	+	+	-	+	+	+
Perchloric Acid	HClO <sub>4</sub>	50			60	+	+	-	o	+	+	+	o	-	o	+	+
Perchloric Acid	HClO <sub>4</sub>	70	1,55		20	+	+	-	+	+	+	+	+	-	+	+	+
Perchloric Acid	HClO <sub>4</sub>	70			40	+	+	-	+	+	+	+	+	-	+	+	+
Perchloric Acid	HClO <sub>4</sub>	70			60	+	+	-	+	+	+	+	+	-	+	+	+
Perchloric Acid	HClO <sub>4</sub>	GL			20	+	+	-	+	+	+	+	+	-	+	+	+
Perchloric Acid	HClO <sub>4</sub>	GL			40	+	+	-	o	+	+	+	+	-	+	+	+
Perchloric Acid	HClO <sub>4</sub>	GL			60	o	+	-	-	+	+	+	+	-	+	+	+
Perchloroethylene	C <sub>2</sub> Cl <sub>4</sub>	TR			20	+	+	-	-	+	+ <sup>1)</sup>	+	+	-	-	+	+
Perchloroethylene	C <sub>2</sub> Cl <sub>4</sub>	TR			40	+	+	-	-	+	+ <sup>1)</sup>	+	+	-	-	+	+
Perchloroethylene	C <sub>2</sub> Cl <sub>4</sub>	TR			60	o	+	-	-	+	+ <sup>1)</sup>	+	+	-	-	+	+
Petrol		H	0,73	AI	20	+	+	+	-	+	+	+	+	+	+	-	+
Petrol		H			40	+	+	+	-	+	+	+	+	+	+	-	+
Petrol		H			60	+	+	+	-	+	+	+	+	+	-	+	+
Petroleum Crude					20	+	+	+	+	+	+	+	+	+	-	+	+
Petroleum Crude					40	+	+	+	+	+	+	+	+	+	-	+	+
Petroleum Crude					60	+	+	+	+	+	+	+	+	+	-	+	+
Petroleum Ether		TR	0,69	AI	20	+	+	+	-	+	+	+	+	+	o	+	+
Petroleum Ether		TR			40	+	+	+	-	+	+	+	+	o	-	+	+
Petroleum Ether		TR			60	+	+	+	-	+	+	+	o	-	-	+	+
Phenol	C <sub>6</sub> H <sub>5</sub> O	100			20	+	+	+	+	+	+	+	+	+	+	+	+
Phenol	C <sub>6</sub> H <sub>5</sub> O	100			40	+	+	+	+	+	+	+	+	+	o	+	+
Phenol	C <sub>6</sub> H <sub>5</sub> O	100			60	+	+	+	+	+	+	+	+	+	o	+	+
Phenol	C <sub>6</sub> H <sub>5</sub> O	50			20	+	+	+	+	+	+	+	+	+	+	+	+
Phenol	C <sub>6</sub> H <sub>5</sub> O	50			40	+	+	+	+	+	+	+	+	+	o	+	+
Phenol	C <sub>6</sub> H <sub>5</sub> O	50			60	+	+	+	+	+	+	+	+	+	o	+	+
Phenol	C <sub>6</sub> H <sub>5</sub> O	90			20	+	+	+	+	+	+	+	+	+	-	+	+
Phenol	C <sub>6</sub> H <sub>5</sub> O	90			40	+	+	+	+	+	+	+	o	+	-	+	+
Phenol	C <sub>6</sub> H <sub>5</sub> O	90			60	+	+	+	+	+	+	+	o	o	-	+	+
Phenyl Chloride					See Chlorobenzene												
Phosphor Chloride					See Phosphorous Trichloride												
Phosphoric Acid	H <sub>3</sub> PO <sub>4</sub>	30	1,18		20	+	+	-	+	+	+	+	+	o	+	+	+
Phosphoric Acid	H <sub>3</sub> PO <sub>4</sub>	30			40	+	+	-	+	+	+	+	+	o	+	+	+
Phosphoric Acid	H <sub>3</sub> PO <sub>4</sub>	30			60	+	+	-	+	+	+	+	+	-	+	+	+
Phosphoric Acid	H <sub>3</sub> PO <sub>4</sub>	50			20	+	+	-	+	+	+	+	+	o	+	+	+
Phosphoric Acid	H <sub>3</sub> PO <sub>4</sub>	50			40	+	+	-	+	+	+	+	+	o	+	+	+
Phosphoric Acid	H <sub>3</sub> PO <sub>4</sub>	50			60	o	+	-	+	+	+	+	+	-	+	+	+
Phosphoric Acid	H <sub>3</sub> PO <sub>4</sub>	85	1,69		20	+	+	-	+	+	+	+	+	-	+	+	+
Phosphoric Acid	H <sub>3</sub> PO <sub>4</sub>	85			40	+	+	-	+	+	+	+	+	-	+	+	+
Phosphoric Acid	H <sub>3</sub> PO <sub>4</sub>	85			60	o	+	-	+	+	+	+	o	-	+	+	+
Phosphoric Acid	H <sub>3</sub> PO <sub>4</sub>	95	1,70		20	-	+	-	+	+	+	o	+	-	o	+	+
Phosphoric Acid	H <sub>3</sub> PO <sub>4</sub>	95			40	-	+	-	o	+	+	o	+	-	o	+	+
Phosphoric Acid	H <sub>3</sub> PO <sub>4</sub>	95			60	-	o	-	-	+	+	o	o	-	o	+	+

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 + = resistant, o = limited resistance, - = not resistant, <sup>1)</sup> Not resistant on FMC



## Resistance Chart

Description	Chemical Formula	Concentration in %	Density [kg/dm³]	Danger class (VbF)	Temperature [°C]	Stainless Steel 316 Ti	Hastelloy C	Aluminium alloy	PP	PVDF	ETFE	PPS	FKM	NBR	EPDM	PTFE/FEP	FFKM	
Phosphorous Trichloride	POCl <sub>3</sub>	TR	1,57		20	+	+	-	+	+	+	+	+	-	+	+	+	
Phosphorous Trichloride	POCl <sub>3</sub>	TR			40	o	o	-	o	+	+	+	+	-	+	+	+	
Phosphorous Trichloride	POCl <sub>3</sub>	TR			60	-	-	-	o	+	+	+	+	-	+	+	+	
Phthalic Acid	C <sub>6</sub> H <sub>4</sub> (COOH) <sub>2</sub> +H <sub>2</sub> O	50			20	+	+	-	+	+	+	+	+	-	+	+	+	
Phthalic Acid	C <sub>6</sub> H <sub>4</sub> (COOH) <sub>2</sub> +H <sub>2</sub> O	50			40	+	+	-	+	+	+	+	+	-	+	+	+	
Phthalic Acid	C <sub>6</sub> H <sub>4</sub> (COOH) <sub>2</sub> +H <sub>2</sub> O	50			60	+	+	-	+	+	+	+	+	-	+	+	+	
Phthalic Acid	C <sub>6</sub> H <sub>4</sub> (COOH) <sub>2</sub> +H <sub>2</sub> O	GL	1,59		20	+	+	-	+	+	+	+	o	-	+	+	+	
Phthalic Acid	C <sub>6</sub> H <sub>4</sub> (COOH) <sub>2</sub> +H <sub>2</sub> O	GL			40	+	+	-	+	+	+	+	o	-	+	+	+	
Phthalic Acid	C <sub>6</sub> H <sub>4</sub> (COOH) <sub>2</sub> +H <sub>2</sub> O	GL			60	+	+	-	+	+	+	+	-	-	o	+	+	
Pine Needle Oil					See Essential Oils													
Polyhydric Alcohol			1,78		20	+	+	+	-	+	+	+	+	+	+	+	+	+
Potash					See Potassium Carbonate													
Potash Bleaching Solution					See Potassium Hypochlorite													
Potassium Aluminium Sulphate	KAl(SO <sub>4</sub> ) <sub>2</sub> ·2H <sub>2</sub> O	50			20	+	+	+	+	+	+	+	+	+	+	+	+	+
Potassium Aluminium Sulphate	KAl(SO <sub>4</sub> ) <sub>2</sub> ·2H <sub>2</sub> O	50			40	+	+	+	+	+	+	+	+	o	+	+	+	+
Potassium Aluminium Sulphate	KAl(SO <sub>4</sub> ) <sub>2</sub> ·2H <sub>2</sub> O	50			60	+	+	+	+	+	+	+	+	-	+	+	+	+
Potassium Bichromate					See Potassium Dichromate													
Potassium Bromate	KBrO <sub>3</sub> +H <sub>2</sub> O	GL			20	+	+	+	+	+	+	+	+	+	+	+	+	+
Potassium Bromate	KBrO <sub>3</sub> +H <sub>2</sub> O	GL			40	+	+	+	+	+	+	+	+	+	+	+	+	+
Potassium Bromate	KBrO <sub>3</sub> +H <sub>2</sub> O	GL			60	+	+	+	+	+	+	+	+	+	+	+	+	+
Potassium Bromide	KBr + H <sub>2</sub> O	10	1,37		20	+	+	-	+	+	+	+	+	+	+	+	+	+
Potassium Bromide	KBr + H <sub>2</sub> O	10			40	+	+	-	+	+	+	+	+	+	+	+	+	+
Potassium Bromide	KBr + H <sub>2</sub> O	10			60	o	+	-	+	+	+	+	+	+	+	+	+	+
Potassium Bromide	KBr + H <sub>2</sub> O	GL			20	+	+	-	+	+	+	+	+	+	+	+	+	+
Potassium Bromide	KBr + H <sub>2</sub> O	GL			40	+	+	-	+	+	+	+	+	+	+	+	+	+
Potassium Bromide	KBr + H <sub>2</sub> O	GL			60	o	+	-	+	+	+	+	+	+	+	+	+	+
Potassium Carbonate	K <sub>2</sub> CO <sub>3</sub>	GL			20	+	+	-	+	+	+	+	+	+	+	+	+	+
Potassium Carbonate	K <sub>2</sub> CO <sub>3</sub>	GL			40	+	+	-	+	+	+	+	+	+	+	+	+	+
Potassium Carbonate	K <sub>2</sub> CO <sub>3</sub>	GL			60	+	+	-	+	+	+	+	+	+	+	+	+	+
Potassium Chlorate	KClO <sub>3</sub>	50			20	+	+	-	+	+	+	+	+	+	+	+	+	+
Potassium Chlorate	KClO <sub>3</sub>	50			40	+	+	-	+	+	+	+	+	+	o	+	+	+
Potassium Chlorate	KClO <sub>3</sub>	50			60	o	+	-	+	+	+	+	+	-	+	+	+	+
Potassium Chloride	KCl	10			20	o	+	-	+	+	+	+	+	+	+	+	+	+
Potassium Chloride	KCl	10			40	o	+	-	+	+	+	+	+	+	+	+	+	+
Potassium Chloride	KCl	10			60	o	o	-	+	+	+	+	+	+	+	+	+	+
Potassium Chloride	KCl	GL	1,17		20	o	+	-	+	+	+	+	+	+	+	+	+	+
Potassium Chloride	KCl	GL			40	o	+	-	+	+	+	+	+	+	+	+	+	+
Potassium Chloride	KCl	GL			60	o	o	-	+	+	+	+	+	+	+	+	+	+
Potassium Cyanide	KCN	50			20	+	+	-	+	+	+	+	+	+	+	+	+	+
Potassium Cyanide	KCN	50			40	+	+	-	+	+	+	+	+	o	+	+	+	+
Potassium Cyanide	KCN	50			60	+	+	-	+	+	+	+	+	o	+	+	+	+
Potassium Cyanide	KCN	GL	1,31		20	+	+	-	+	+	+	+	+	+	+	+	+	+
Potassium Cyanide	KCN	GL			40	+	+	-	+	+	+	+	+	+	+	+	+	+
Potassium Cyanide	KCN	GL			60	+	+	-	+	o	+	+	+	+	+	+	+	+
Potassium Dichromate	K <sub>2</sub> Cr <sub>2</sub> O <sub>7</sub>	40			20	+	+	-	+	+	+	+	+	+	+	+	+	+
Potassium Ferricyanide	K <sub>4</sub> Fe(CN) <sub>6</sub>	10			20	+	+	+	+	+	+	+	+	+	+	+	+	+
Potassium Ferricyanide	K <sub>4</sub> Fe(CN) <sub>6</sub>	10			40	+	+	+	+	+	+	+	+	+	+	+	+	+
Potassium Ferricyanide	K <sub>4</sub> Fe(CN) <sub>6</sub>	10			60	+	+	+	+	+	+	+	+	+	+	+	+	+
Potassium Ferricyanide	K <sub>4</sub> Fe(CN) <sub>6</sub>	20	1,11		20	+	+	+	+	+	+	+	+	+	+	+	+	+
Potassium Ferricyanide	K <sub>4</sub> Fe(CN) <sub>6</sub>	20			40	+	+	+	+	+	+	+	+	+	+	+	+	+

TR = technically pure, GL = saturated solution, H = commercial composition  
 + = resistant, o = limited resistance, - = not resistant, <sup>1)</sup> Not resistant on FMC



## Resistance Chart

Description	Chemical Formula	Concentration in %	Density [kg/dm <sup>3</sup> ]	Danger class (VbF)	Temperature [°C]	Stainless Steel 316 Ti	Hastelloy C	Aluminium alloy	PP	PVDF	ETFE	PPS	FKM	NBR	EPDM	PTFE/FEP	FFKM
Potassium Ferricyanide	K <sub>4</sub> Fe(CN) <sub>6</sub>	20			60	+	+	+	+	+	+	+	+	+	+	+	+
Potassium Ferricyanide	K <sub>4</sub> Fe(CN) <sub>6</sub>	GL			20	+	+	+	+	+	+	+	+	+	+	+	+
Potassium Ferricyanide	K <sub>4</sub> Fe(CN) <sub>6</sub>	GL			40	+	+	+	+	+	+	+	+	+	+	+	+
Potassium Ferricyanide	K <sub>4</sub> Fe(CN) <sub>6</sub>	GL			60	+	+	+	+	+	+	+	+	+	+	+	+
Potassium Ferrocyanide	K <sub>3</sub> Fe(CN) <sub>6</sub>	10			20	+ <sup>1)</sup>	+	+	+ <sup>1)</sup>	+	+	o	+	+	+	+	+
Potassium Ferrocyanide	K <sub>3</sub> Fe(CN) <sub>6</sub>	10			40	+ <sup>1)</sup>	+	+	+ <sup>1)</sup>	+	+	o	+	+	+	+	+
Potassium Ferrocyanide	K <sub>3</sub> Fe(CN) <sub>6</sub>	10			60	+ <sup>1)</sup>	+	+	+ <sup>1)</sup>	+	+	o	+	+	+	+	+
Potassium Ferrocyanide	K <sub>3</sub> Fe(CN) <sub>6</sub>	16	1,11		20	+ <sup>1)</sup>	+	+	+ <sup>1)</sup>	+	+	o	+	+	+	+	+
Potassium Ferrocyanide	K <sub>3</sub> Fe(CN) <sub>6</sub>	16			40	+ <sup>1)</sup>	+	+	+ <sup>1)</sup>	+	+	o	+	+	+	+	+
Potassium Ferrocyanide	K <sub>3</sub> Fe(CN) <sub>6</sub>	16			60	+ <sup>1)</sup>	+	+	+ <sup>1)</sup>	+	+	o	+	+	+	+	+
Potassium Ferrocyanide	K <sub>3</sub> Fe(CN) <sub>6</sub>	GL			20	+ <sup>1)</sup>	+	+	+ <sup>1)</sup>	+	+	o	+	+	+	+	+
Potassium Ferrocyanide	K <sub>3</sub> Fe(CN) <sub>6</sub>	GL			40	+ <sup>1)</sup>	+	+	+ <sup>1)</sup>	+	+	o	+	+	+	+	+
Potassium Ferrocyanide	K <sub>3</sub> Fe(CN) <sub>6</sub>	GL			60	+ <sup>1)</sup>	+	+	+ <sup>1)</sup>	+	+	o	+	+	+	+	+
Potassium Hydroxide	KOH	20	1,19		20	+	+	-	+	+	+	-	o	+	+	+	+
Potassium Hydroxide	KOH	20			40	+	+	-	+	+	+	-	o	o	+	+	+
Potassium Hydroxide	KOH	20			60	+	+	-	+	+	+	-	o	o	+	+	+
Potassium Hydroxide	KOH	30	1,29		20	+	+	-	+	+	+	-	o	+	+	+	+
Potassium Hydroxide	KOH	30			40	+	+	-	+	+	+	-	o	o	+	+	+
Potassium Hydroxide	KOH	30			60	+	+	-	+	+	+	-	o	o	+	+	+
Potassium Hydroxide	KOH	60	1,63		20	+	+	-	+	+	+	-	-	-	+	+	+
Potassium Hydroxide	KOH	60			40	+	+	-	+	+	+	-	-	-	+	+	+
Potassium Hydroxide	KOH	60			60	+	+	-	+	+	+	-	-	-	+	+	+
Potassium Hypochlorite	KClO	15			20	o	+	-	o	+	+	+	-	-	+	+	+
Potassium Hypochlorite	KClO	15			40	o	+	-	o	+	+	+	-	o	+	+	+
Potassium Hypochlorite	KClO	15			60	o	o	-	-	+	+	+	-	-	+	+	+
Potassium Iodide	KJ	50	1,55		20	+	+	+	+	+	+	+	+	+	+	+	+
Potassium Iodide	KJ	50			40	+	+	+	+	+	+	+	+	o	+	+	+
Potassium Iodide	KJ	50			60	o	+	+	+	+	+	+	+	o	+	+	+
Potassium Iodide	KJ	GL			20	+	+	+	+	+	+	+	+	+	+	+	+
Potassium Iodide	KJ	GL			40	+	+	+	+	+	+	+	+	o	+	+	+
Potassium Iodide	KJ	GL			60	o	+	o	+	+	+	+	+	o	+	+	+
Potassium Nitrate	KNO <sub>3</sub>	10			20	+	+	+	+	+	+	+	+	+	+	+	+
Potassium Nitrate	KNO <sub>3</sub>	10			40	+	+	+	+	+	+	+	+	+	+	+	+
Potassium Nitrate	KNO <sub>3</sub>	10			60	+	+	+	+	+	+	+	+	+	+	+	+
Potassium Nitrate	KNO <sub>3</sub>	24	1,17		20	+	+	+	+	+	+	+	+	+	+	+	+
Potassium Nitrate	KNO <sub>3</sub>	24			40	+	+	+	+	+	+	+	+	+	+	+	+
Potassium Nitrate	KNO <sub>3</sub>	24			60	+	+	+	+	+	+	+	+	+	+	+	+
Potassium Oxalate	K <sub>2</sub> (CO <sub>2</sub> ) <sub>2</sub>				20	+	+	-	+	+	+	+	-	+	+	+	+
Potassium Oxalate	K <sub>2</sub> (CO <sub>2</sub> ) <sub>2</sub>				40	+	+	-	+	+	+	+	-	+	+	+	+
Potassium Oxalate	K <sub>2</sub> (CO <sub>2</sub> ) <sub>2</sub>				60	+	+	-	+	+	+	+	-	+	+	+	+
Potassium Permanganate	KMnO <sub>4</sub>	6	1,04		20	+	+	+	+	+	+	+	+	o	+	+	+
Potassium Permanganate	KMnO <sub>4</sub>	6			40	+	+	+	+	+	+	+	+	o	+	+	+
Potassium Permanganate	KMnO <sub>4</sub>	6			60	+	+	+	+	+	+	+	+	o	+	+	+
Potassium Permanganate	KMnO <sub>4</sub>	18			20	+	+	+	+	+	+	+	+	o	+	+	+
Potassium Permanganate	KMnO <sub>4</sub>	18			40	+	+	+	+	+	+	+	+	o	+	+	+
Potassium Sulphate	K <sub>2</sub> SO <sub>4</sub>	10	1,08		20	+	+	+	+	+	+	+	+	+	+	+	+
Potassium Sulphate	K <sub>2</sub> SO <sub>4</sub>	10			40	+	+	+	+	+	+	+	+	+	+	+	+
Potassium Sulphate	K <sub>2</sub> SO <sub>4</sub>	10			60	+	+	+	+	+	+	+	+	+	+	+	+
Propanediol					See Propylene Glycol												
Propanone					See Acetone												



## Resistance Chart

Description	Chemical Formula	Concentration in %	Density [kg/dm³]	Danger class (VbF)	Temperature [C°]	Stainless Steel 316 Ti	Hastelloy C	Aluminium alloy	PP	PVDF	ETFE	PPS	FKM	NBR	EPDM	PTFE/FEP	FFKM	
Propionic Acid	C <sub>3</sub> H <sub>6</sub> O <sub>2</sub>	50			20	+	+	-	+	+	+	+	+	-	o	+	+	
Propionic Acid	C <sub>3</sub> H <sub>6</sub> O <sub>2</sub>	50			40	+	+	-	+	+	+	+	+	-	o	+	+	
Propionic Acid	C <sub>3</sub> H <sub>6</sub> O <sub>2</sub>	50			60	+	+	-	+	+	+	+	o	-	o	+	+	
Propionic Acid	C <sub>3</sub> H <sub>6</sub> O <sub>2</sub>	TR	0,99		20	+	+	-	+	+	+	+	+	-	+	+	+	
Propionic Acid	C <sub>3</sub> H <sub>6</sub> O <sub>2</sub>	TR			40	+	+	-	o	+	+	+	+	-	+	+	+	
Propionic Acid	C <sub>3</sub> H <sub>6</sub> O <sub>2</sub>	TR			60	+	+	-	o	+	+	+	+	-	o	+	+	
Propyl Acetate					See Isopropylacetate													
Propyl Alcohol	C <sub>3</sub> H <sub>8</sub> O	TR		B	20	+	+	+	+	+	+ <sup>1)</sup>	+	+	+	o	+	+	
Propyl Alcohol	C <sub>3</sub> H <sub>8</sub> O	TR			40	+	+	+	+	+	+ <sup>1)</sup>	+	+	+	o	+	+	
Propyl Alcohol	C <sub>3</sub> H <sub>8</sub> O	TR			60	+	+	+	+	+	+ <sup>1)</sup>	+	+	+	o	+	+	
Propylene Aldehyde	C <sub>4</sub> H <sub>6</sub> O	TR		AI	20	+	+	+	-	+	+	+	+	+	+	+	+	
Propylene Glycol	C <sub>3</sub> H <sub>8</sub> O <sub>2</sub>	TR	1,04		20	+	+	+	+	+	+	+	+	+	+	+	+	
Propylene Glycol	C <sub>3</sub> H <sub>8</sub> O <sub>2</sub>	TR			40	+	+	+	+	+	+	+	+	o	+	+	+	
Propylene Glycol	C <sub>3</sub> H <sub>8</sub> O <sub>2</sub>	TR			60	+	+	+	+	+	+	+	o	-	+	+	+	
Propylene Oxide	C <sub>3</sub> H <sub>6</sub> O	TR	0,83	AI	20	+	+	+	+	+	+	+	-	-	-	+	+	
Propylene Oxide	C <sub>3</sub> H <sub>6</sub> O	TR			40	+	+	+	+	+	+	+	-	-	-	+	+	
Prussic Acid					See Hydrocyanic Acid													
Pyrantron					See Diacetone Alcohol													
Pyridine	C <sub>5</sub> H <sub>5</sub> N	TR	0,99	B	20	+	+	+	o	+	+	+	o	-	+	+	+	
Pyridine	C <sub>5</sub> H <sub>5</sub> N	TR			40	+	+	+	o	+	+	+	-	-	o	+	+	
Pyridine	C <sub>5</sub> H <sub>5</sub> N	TR			60	+	+	+	o	o	+	+	-	-	o	+	+	
Pyrogallic Acid					See Pyrogallol													
Pyrogallol	C <sub>6</sub> H <sub>3</sub> (OH) <sub>3</sub> -1,2,3	10			20	+	+	+	+	+	+	+	o	+	+	+	+	
Pyrogallol	C <sub>6</sub> H <sub>3</sub> (OH) <sub>3</sub> -1,2,3	10			40	+	+	+	+	+	+	+	-	+	+	+	+	
Pyrogallol	C <sub>6</sub> H <sub>3</sub> (OH) <sub>3</sub> -1,2,3	10			60	+	+	+	+	+	+	+	-	+	+	+	+	
Ricinus Oil		H	0,96		20	+	+	+	+	+	+	+	+	+	+	+	+	
Ricinus Oil		H			40	+	+	+	+	+	+	+	+	+	+	+	+	
Ricinus Oil		H			60	+	+	+	+	+	+	+	+	+	+	+	+	
Salade Oil		H			20	+	+	+	+	+	+	+	+	+	+	+	+	
Salade Oil		H			40	+	+	+	+	+	+	+	+	+	o	+	+	
Salade Oil		H			60	+	+	+	o	+	+	+	+	+	-	+	+	
Salmiac					See Ammonium Chloride													
Saltpeter					See Potassium Nitrate													
Sea Water					20	o	+	-	+	+	+	+	+	+	+	+	+	
Sea Water					40	o	+	-	+	+	+	+	+	o	+	+	+	
Sea Water					60	o	+	-	+	+	+	+	+	o	+	+	+	
Sel Volatile					See Ammonium Carbonate													
Silicic Acid	Si(OH) <sub>4</sub>	TR			20	+	+	-	+	+	+	+	+	-	+	+	+	
Silicic Acid	Si(OH) <sub>4</sub>	TR			40	+	+	-	+	+	+	+	+	-	+	+	+	
Silicic Acid	Si(OH) <sub>4</sub>	TR			60	+	+	-	+	+	+	+	+	-	+	+	+	
Silicofluoric Acid					See Hydrofluosilic Acid													
Silicone Oil		TR	1,06		20	+	+	+	+	+	+	+	+	+	o	+	+	
Silicone Oil		TR			40	+	+	+	+	+	+	+	+	+	o	+	+	
Silicone Oil		TR			60	+	+	+	+	+	+	+	+	+	o	+	+	
Silver Nitrate	AgNO <sub>3</sub>	8	1,07		20	+	+	-	+	+	+	+	+	+	+	+	+	
Silver Nitrate	AgNO <sub>3</sub>	8			40	+	+	-	+	+	+	+	+	+	+	+	+	
Silver Nitrate	AgNO <sub>3</sub>	8			60	+	+	-	+	+	+	+	+	+	+	+	+	
Soda					See Sodium Bicarbonate													
Sodium Acetate	CH <sub>3</sub> COONa	10			20	+	+	+	+	+	+	+	+	+	+	+	+	
Sodium Acetate	CH <sub>3</sub> COONa	10			40	+	+	+	+	+	+	+	+	+	+	+	+	

TR = technically pure, GL = saturated solution, H = commercial composition  
+ = resistant, o = limited resistance, - = not resistant, <sup>1)</sup> Not resistant on FMC



## Resistance Chart

Description	Chemical Formula	Concentration in %	Density [kg/dm³]	Danger class (VbF)	Temperature [°C]	Stainless Steel 316 Ti	Hastelloy C	Aluminium alloy	PP	PVDF	ETFE	PPS	FKM	NBR	EPDM	PTFE/FEP	FFKM	
Sodium Acetate	CH <sub>3</sub> COONa	10			60	+	+	+	+	+	+	+	+	o	+	+	+	
Sodium Benzoate	C <sub>7</sub> H <sub>5</sub> NaO <sub>2</sub>	10			20	+	+	+	+	+	+	+	+	+	+	+	+	
Sodium Benzoate	C <sub>7</sub> H <sub>5</sub> NaO <sub>2</sub>	10			40	+	+	+	+	+	+	+	+	+	+	+	+	
Sodium Benzoate	C <sub>7</sub> H <sub>5</sub> NaO <sub>2</sub>	10			60	+	+	+	+	+	+	+	+	o	+	+	+	
Sodium Benzoate	C <sub>7</sub> H <sub>5</sub> NaO <sub>2</sub>	36			20	+	+	+	+	+	+	+	+	+	+	+	+	
Sodium Benzoate	C <sub>7</sub> H <sub>5</sub> NaO <sub>2</sub>	36			40	+	+	+	+	+	+	+	+	+	+	+	+	
Sodium Benzoate	C <sub>7</sub> H <sub>5</sub> NaO <sub>2</sub>	36			60	+	+	+	+	+	+	+	+	o	+	+	+	
Sodium Benzoate	C <sub>7</sub> H <sub>5</sub> NaO <sub>2</sub>	GL			20	+	+	+	+	+	+	+	+	+	+	+	+	
Sodium Benzoate	C <sub>7</sub> H <sub>5</sub> NaO <sub>2</sub>	GL			40	+	+	+	+	+	+	+	+	+	+	+	+	
Sodium Bicarbonate	NaHCO <sub>3</sub>	10	1,07		20	+	+	+	+	+	+	+	+	+	+	+	+	
Sodium Bicarbonate	NaHCO <sub>3</sub>	10			40	+	+	+	+	+	+	+	+	+	+	+	+	
Sodium Bicarbonate	NaHCO <sub>3</sub>	10			60	+	+	+	+	+	+	+	+	+	+	+	+	
Sodium Bichromate	Na <sub>2</sub> Cr <sub>2</sub> O <sub>7</sub>	10			20	+	+	+	+	+	+	+	+	+	+	+	+	
Sodium Bichromate	Na <sub>2</sub> Cr <sub>2</sub> O <sub>7</sub>	10			40	+	+	+	+	+	+	+	+	+	+	+	+	
Sodium Bichromate	Na <sub>2</sub> Cr <sub>2</sub> O <sub>7</sub>	10			60	+	+	+	+	+	+	+	+	o	+	+	+	
Sodium Chlorate	NaClO <sub>3</sub>	25	1,23		20	+	+	-	+	+	+	+	+	+	+	+	+	
Sodium Chlorate	NaClO <sub>3</sub>	25			40	+	+	-	+	+	+	+	+	o	+	+	+	
Sodium Chlorate	NaClO <sub>3</sub>	25			60	o	+	-	+	+	+	+	+	-	+	+	+	
Sodium Chloride	NaCl	20			20	o	+	+	+	+	+	+	+	+	+	+	+	
Sodium Chloride	NaCl	20			40	o	+	+	+	+	+	+	+	+	+	+	+	
Sodium Chloride	NaCl	20			60	o	o	o	o	+	+	+	+	o	+	+	+	
Sodium Chlorite	NaClO <sub>2</sub>	5			20	o	+	-	+	+	+	+	+	+	+	+	+	
Sodium Chlorite	NaClO <sub>2</sub>	5			40	-	o	-	+	+	+	+	+	+	+	+	+	
Sodium Chlorite	NaClO <sub>2</sub>	5			60	-	o	-	+	+	+	+	+	o	+	+	+	
Sodium Dichromate					See Sodium Bichromate													
Sodium Fluoride	NaF	4	1,04		20	+	+	-	+	+	+	+	+	+	+	+	+	+
Sodium Fluoride	NaF	4			40	+	+	-	+	+	+	+	+	o	+	+	+	
Sodium Fluoride	NaF	4			60	o	+	-	+	+	+	+	+	o	+	+	+	
Sodium Hydroxyde	NaOH	10	1,16		20	+	+	-	+	o	+	+	+	+	+	+	+	
Sodium Hydroxyde	NaOH	10			40	+	+	-	+	o	+	+	+	+	+	+	+	
Sodium Hydroxyde	NaOH	10			60	+	+	-	+	o	+	+	+	o	o	+	+	
Sodium Hydroxyde	NaOH	30	1,33		20	+	+	-	+	o	+	+	o	+	+	+	+	
Sodium Hydroxyde	NaOH	30			40	+	+	-	+	o	+	+	o	o	o	+	+	
Sodium Hydroxyde	NaOH	30			60	+	+	-	+	o	+	+	o	o	o	+	+	
Sodium Hydroxyde	NaOH	50	1,53		20	+	+	-	+	o	+	+	o	o	o	+	+	
Sodium Hydroxyde	NaOH	50			40	+	+	-	+	o	+	+	o	-	+	+	+	
Sodium Hydroxyde	NaOH	50			60	o	+	-	+	o	+	+	-	-	+	+	+	
Sodium Hypochlorite	NaOCl	10			20	o	+	-	+	+	+	+	+	-	+	+	+	
Sodium Hypochlorite	NaOCl	12,5			20	o	+	-	+	+	+	+	+	-	+	+	+	
Sodium Hypochlorite	NaOCl	12,5			40	o	+	-	o	+	+	+	o	-	o	+	+	
Sodium Hypochlorite	NaOCl	20			20	o	+	-	+	+	+	+	+	-	+	+	+	
Sodium Hypochlorite	NaOCl	20			40	o	+	-	o	+	+	+	o	-	o	+	+	
Sodium Hypochlorite	NaOCl	20			60	o	+	-	-	+	+	+	o	-	o	+	+	
Sodium Hyposulphide					See Sodium Thiosulphate													
Sodium Nitrate	NaNO <sub>3</sub>	45	1,37		20	+	+	+	+	+	+	+	+	+	+	+	+	+
Sodium Nitrate	NaNO <sub>3</sub>	45			40	+	+	+	+	+	+	+	+	+	+	+	+	
Sodium Nitrate	NaNO <sub>3</sub>	45			60	+	+	+	+	+	+	+	+	+	+	+	+	
Sodium Nitrite	NaNO <sub>2</sub>	50			20	+	+	+	+	+	+	+	+	+	+	+	+	
Sodium Nitrite	NaNO <sub>2</sub>	50			40	+	+	+	+	+	+	+	+	o	+	+	+	
Sodium Nitrite	NaNO <sub>2</sub>	50			60	+	+	+	+	+	+	+	+	-	+	+	+	

TR = technically pure, GL = saturated solution, H = commercial composition  
 + = resistant, o = limited resistance, - = not resistant, <sup>1)</sup> Not resistant on FMC



## Resistance Chart

Description	Chemical Formula	Concentration in %	Density [kg/dm³]	Danger class (VbF)	Temperature [C°]	Stainless Steel 316 Ti	Hastelloy C	Aluminium alloy	PP	PVDF	ETFE	PPS	FKM	NBR	EPM	PTFE/FEP	FFKM		
Sodium Perchlorate	NaClO <sub>4</sub>	25	1,18		20	o	+	+	+ <sup>1)</sup>	+	+	-	+	+	+	+	+		
Sodium Perchlorate	NaClO <sub>4</sub>	25			40	o	+	+	+ <sup>1)</sup>	+	+	-	+	+	+	+	+		
Sodium Perchlorate	NaClO <sub>4</sub>	25			60	o	+	o	+ <sup>1)</sup>	+	+	-	+	o	+	+	+		
Sodium Phosphate	Na <sub>3</sub> PO <sub>4</sub>	10			20	+	+	+	+	+	+	+	+	+	+	+	+		
Sodium Phosphate	Na <sub>3</sub> PO <sub>4</sub>	10			40	+	+	+	+	+	+	+	+	+	+	+	+		
Sodium Phosphate	Na <sub>3</sub> PO <sub>4</sub>	10			60	+	+	+	+	+	+	+	+	+	+	+	+		
Sodium Silicate					See Sodium Water Glass														
Sodium Sulphate	Na <sub>2</sub> SO <sub>4</sub>	50	1,46		20	+	+	+	+	+	+	+	+	+	+	+	+	+	
Sodium Sulphate	Na <sub>2</sub> SO <sub>4</sub>	50			40	+	+	+	+	+	+	+	+	+	+	+	+	+	
Sodium Sulphate	Na <sub>2</sub> SO <sub>4</sub>	50			60	+	+	+	+	+	+	+	+	+	+	+	+	+	
Sodium Sulphite	Na <sub>2</sub> SO <sub>3</sub>	GL	1,18		20	+	+	+	+	+	+	+	+	+	+	+	+	+	
Sodium Sulphite	Na <sub>2</sub> SO <sub>3</sub>	GL			40	+	+	o	+	+	+	+	+	o	+	+	+	+	
Sodium Sulphite	Na <sub>2</sub> SO <sub>3</sub>	GL			60	+	+	-	+	+	+	+	+	-	+	+	+	+	
Sodium Tetraborate					See Borax														
Sodium Thiosulphate	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	40			20	+	+	+	+	+	+	+	+	o	+	+	+	+	
Sodium Thiosulphate	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	40			40	+	+	+	+	+	+	+	+	o	-	+	+	+	
Sodium Thiosulphate	Na <sub>2</sub> S <sub>2</sub> O <sub>3</sub>	40			60	+	+	+	o	+	+	+	+	-	-	+	+	+	
Sodium Water Glass	Na <sub>2</sub> SiO <sub>3</sub>	20	1,24		20	+	+	+	+	+	+	+	+	+	+	+	+	+	
Sodium Water Glass	Na <sub>2</sub> SiO <sub>3</sub>	20			40	+	+	+	+	+	+	+	+	+	+	+	+	+	
Sodium Water Glass	Na <sub>2</sub> SiO <sub>3</sub>	20			60	+	+	+	+	+	+	+	+	+	+	+	+	+	
Spindle Oil		TR			20	+	+	+	+	+	+	+	+	o	+	+	+	+	
Spindle Oil		TR			40	+	+	+	o	+	+	+	+	+	-	+	+	+	
Spindle Oil		TR			60	+	+	+	o	+	+	+	o	o	-	+	+	+	
Spirit of Wine					See Ethanol														
Spruce-Needle Oil					See Essential Oils														
Stannous Chloride	SnCl <sub>2</sub>	20	1,17		20	o	+	-	+	+	+	+	+	+	+	+	+	+	
Stannous Chloride	SnCl <sub>2</sub>	20			40	o	+	-	+	+	+	+	+	+	+	+	+	+	
Stannous Chloride	SnCl <sub>2</sub>	20			60	o	+	-	+	+	+	+	+	+	+	+	+	+	
Starch Gum					See Dextrine														
Styrene	C <sub>6</sub> H <sub>5</sub> CHCH <sub>2</sub>	TR	0,91	All	20	+	+	+	o	o	+	+	o	-	-	+	+	+	
Succinic Acid					See Ethane Dicarbonic Acid														
Sulphur Chloride	S <sub>2</sub> Cl <sub>2</sub>	10			20	o	+	o	o	+	+	-	+	-	-	+	+	+	
Sulphuric Acid	H <sub>2</sub> SO <sub>4</sub>	40	1,30		20	o	+	-	+	+	+	+	+	o	+	+	+	+	
Sulphuric Acid	H <sub>2</sub> SO <sub>4</sub>	40			40	-	+	-	+	+	+	+	+	o	+	+	+	+	
Sulphuric Acid	H <sub>2</sub> SO <sub>4</sub>	40			60	-	o	-	o	+	+	+	+	-	+	+	+	+	
Sulphuric Acid	H <sub>2</sub> SO <sub>4</sub>	80	1,73		20	o	+	-	+	+	+	+	+	-	+	+	+	+	
Sulphuric Acid	H <sub>2</sub> SO <sub>4</sub>	80			40	-	o	-	+ <sup>1)</sup>	+	+	o	+	-	+	+	+	+	
Sulphuric Acid	H <sub>2</sub> SO <sub>4</sub>	80			60	-	o	-	o	+	+	o	+	-	o	+	+	+	
Sulphuric Acid	H <sub>2</sub> SO <sub>4</sub>	90	1,82		20	+ <sup>1)</sup>	+	-	o	+	+	o	+	-	+	+	+	+	
Sulphuric Acid	H <sub>2</sub> SO <sub>4</sub>	90			40	o	+	-	o	+	+	o	+	-	+	+	+	+	
Sulphuric Acid	H <sub>2</sub> SO <sub>4</sub>	90			60	o	+	-	o	+	+	o	+	-	o	+	+	+	
Sulphuric Acid	H <sub>2</sub> SO <sub>4</sub>	98	1,84		20	+ <sup>1)</sup>	+	-	o	+	+	o	+	-	o	+	+	+	
Sulphuric Acid	H <sub>2</sub> SO <sub>4</sub>	98			40	o	+	-	o	+	+	o	o	-	o	+	+	+	
Sulphuric Acid	H <sub>2</sub> SO <sub>4</sub>	98			60	o	+	-	o	+	+	-	-	-	o	+	+	+	
Sulphuric Ether					See Ether														
Sulphurous Acid	H <sub>2</sub> SO <sub>3</sub>	50			20	o	+	-	+	+	+	+	+	o	+	+	+	+	
Sulphurous Acid	H <sub>2</sub> SO <sub>3</sub>	50			40	o	+	-	+	+	+	+	+	-	+	+	+	+	
Sulphurous Acid	H <sub>2</sub> SO <sub>3</sub>	50			60	-	o	-	+	+	+	+	+	o	-	+	+	+	
Sulphite Lye					See Calcium Bisulphite														
Sylvine					See Potassium Chloride														

TR = technically pure, GL = saturated solution, H = commercial composition  
+ = resistant, o = limited resistance, - = not resistant, <sup>1)</sup> Not resistant on FMC



## Resistance Chart

Description	Chemical Formula	Concentration in %	Density [kg/dm³]	Danger class (VbF)	Temperature [°C]	Stainless Steel 316 Ti	Hastelloy C	Aluminium alloy	PP	PVDF	ETFE	PPS	FKM	NBR	EPDM	PTFE/FEP	FFKM		
Tannic Acid	C <sub>2</sub> O <sub>6</sub> H <sub>6</sub>	50			20	+ <sup>1)</sup>	+	-	+ <sup>1)</sup>	+	+	-	+	+	+	+	+		
Tannic Acid	C <sub>2</sub> O <sub>6</sub> H <sub>6</sub>	50			40	+ <sup>1)</sup>	+	-	+ <sup>1)</sup>	+	+	-	+	o	+	+	+		
Tannic Acid	C <sub>2</sub> O <sub>6</sub> H <sub>6</sub>	50			60	+ <sup>1)</sup>	+	-	+ <sup>1)</sup>	+	+	-	+	-	+	+	+		
Tanning Extracts Vegetable		H			20	+ <sup>1)</sup>	+	+	+ <sup>1)</sup>	+	+	-	+	+	+	+	+		
Tanning Extracts Vegetable		H			40	+ <sup>1)</sup>	+	o	+ <sup>1)</sup>	+	+	-	+	o	+	+	+		
Tanning Extracts Vegetable		H			60	+ <sup>1)</sup>	+	-	o	+	+	-	+	-	o	+	+		
Tartaric Acid	C <sub>4</sub> H <sub>6</sub> O <sub>6</sub>	GL	1,76		20	+	+	-	+	+	+	+	+	+	+	+	+		
Tartaric Acid	C <sub>4</sub> H <sub>6</sub> O <sub>6</sub>	GL			40	+	+	-	+	+	+	+	+	+	+	+	+		
Tartaric Acid	C <sub>4</sub> H <sub>6</sub> O <sub>6</sub>	GL			60	+	+	-	+	+	+	+	+	o	+	+	+		
Tetrachloroethane	Cl <sub>2</sub> CH-CHCl	TR	1,60		20	+	+	-	o	+	+	+	o	-	-	+	+		
Tetrachloroethane	Cl <sub>2</sub> CH-CHCl <sub>2</sub>	TR			40	+	+	-	o	+	+	+	o	-	-	+	+		
Tetrachloroethane	Cl <sub>2</sub> CH-CHCl <sub>2</sub>	TR			60	+	+	-	-	o	+	+	o	-	-	+	+		
Tetrachloroethylene					Perchlorethylene														
Tetrachloromethane	CCl <sub>4</sub>	TR	1,59		20	+ <sup>1)</sup>	+	+	o	+	+ <sup>1)</sup>	o	+	-	o	+	+		
Tetrachloromethane	CCl <sub>4</sub>	TR			40	+ <sup>1)</sup>	+	+	o	+	+ <sup>1)</sup>	o	+	-	-	+	+		
Tetrachloromethane	CCl <sub>4</sub>	TR			60	+ <sup>1)</sup>	+	o	-	+	+ <sup>1)</sup>	o	+	-	-	+	+		
Tetrahydrofuran	C <sub>4</sub> H <sub>8</sub> O	TR	0,89	B	20	+ <sup>1)</sup>	+	-	o	o	o	+	+	o	-	o	+		
Tetrahydrofuran	C <sub>4</sub> H <sub>8</sub> O	TR			40	+ <sup>1)</sup>	+	-	-	-	+	+	o	-	-	+	+		
Tetrahydrofuran	C <sub>4</sub> H <sub>8</sub> O	TR			60	+ <sup>1)</sup>	+	-	-	-	+	+	o	-	-	+	+		
Tetrahydronaphthalene					Tetraline														
Tetraline	C <sub>10</sub> H <sub>12</sub>	100	0,97	AIII	20	+	+	+	-	+	+	+	+	-	o	+	+		
Tetraline	C <sub>10</sub> H <sub>12</sub>	100			40	+	+	+	-	+	+	+	+	-	-	+	+		
Tetraline	C <sub>10</sub> H <sub>12</sub>	100			60	+	+	+	-	+	+	+	+	-	-	+	+		
Thiofuran					Thiophene														
Thionyl Chloride	SOCl <sub>2</sub>	TR	1,66		20	+	+	-	-	+	+	+	+	-	-	+	+	+	
Thionyl Chloride	SOCl <sub>2</sub>	TR			40	+	+	-	-	+	+	+	+	-	-	+	+	+	
Thionyl Chloride	SOCl <sub>2</sub>	TR			60	+	+	-	-	+	+	+	+	-	-	+	+	+	
Thiophene	C <sub>4</sub> H <sub>4</sub> S			AI	20	+	+	-	o	+	+	+	+	-	-	+	+	+	
Toluene	C <sub>6</sub> H <sub>8</sub>		0,87	AI	20	+	+	+	o	+	+	+	o	-	o	+	+	+	
Toluene	C <sub>6</sub> H <sub>8</sub>				40	+	+	+	o	+	+	+	o	-	-	+	+	+	
Toluene	C <sub>6</sub> H <sub>8</sub>				60	+	+	+	o	+	+	+	o	-	-	+	+	+	
Toothpaste		H			20	+	+	+	+	+	+	+	+	+	+	+	+	+	
Transformer Oil		TR			20	+	+	+	o	+	+	+	+	+	o	+	+		
Transformer Oil		TR			40	+	+	+	o	+	+	+	+	+	+	-	+	+	
Transformer Oil		TR			60	+	+	+	o	+	+	+	+	+	+	-	+	+	
Tributyl Phosphate	C <sub>12</sub> H <sub>27</sub> O <sub>4</sub> P	TR	0,98		20	+	+	o	+	+	+	+	+	-	+	+	+		
Tributyl Phosphate	C <sub>12</sub> H <sub>27</sub> O <sub>4</sub> P	TR			40	+	+	o	+	+	+	+	o	-	+	+	+		
Tributyl Phosphate	C <sub>12</sub> H <sub>27</sub> O <sub>4</sub> P	TR			60	+	+	o	+	+	+	+	-	-	+	+	+		
Trichloroacetic Acid	CCl <sub>3</sub> CO <sub>2</sub> H	50			20	o	+	-	+	+	+	+	-	-	+	+	+		
Trichloroacetic Acid	CCl <sub>3</sub> CO <sub>2</sub> H	50			40	-	+	-	+	+	+	+	-	-	o	+	+		
Trichloroacetic Acid	CCl <sub>3</sub> CO <sub>2</sub> H	50			60	-	+	-	+	o	+	+	-	-	-	+	+		
Trichloroacetic Acid	CCl <sub>3</sub> CO <sub>2</sub> H	TR	1,62		20	o	+	-	+	+	+	+	-	o	+	+	+		
Trichloroacetic Acid	CCl <sub>3</sub> CO <sub>2</sub> H	TR			40	-	+	-	o	+	+	+	-	-	o	+	+		
Trichloroacetic Acid	CCl <sub>3</sub> CO <sub>2</sub> H	TR			60	-	+	-	o	o	+	+	-	-	-	+	+		
Trichlorobenzene	C <sub>6</sub> H <sub>3</sub> Cl <sub>3</sub>				20	+ <sup>1)</sup>	+	-	o	+	+	-	+	-	+	+	+		
Trichlorobenzene	C <sub>6</sub> H <sub>3</sub> Cl <sub>3</sub>				40	+ <sup>1)</sup>	+	-	o	+	+	-	+	-	+	+	+		
Trichlorobenzene	C <sub>6</sub> H <sub>3</sub> Cl <sub>3</sub>				60	+ <sup>1)</sup>	+	-	o	+	+	-	+	-	o	+	+		
Trichloroethane	C <sub>2</sub> H <sub>3</sub> Cl <sub>3</sub>	TR	1,34		20	+ <sup>1)</sup>	+	-	o	+	+	o	o	-	-	+	+		
Trichloroethylene	C <sub>2</sub> HCl <sub>3</sub>	50			20	+	+	-	o	+	+ <sup>1)</sup>	+	o	-	o	+	+		
Trichloroethylene	C <sub>2</sub> HCl <sub>3</sub>	50			40	+	+	-	o	+	+ <sup>1)</sup>	+	o	-	-	+	+		

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 + = resistant, o = limited resistance, - = not resistant, <sup>1)</sup> Not resistant on FMC



## Resistance Chart

Description	Chemical Formula	Concentration in %	Density [kg/dm³]	Danger class (VbF)	Temperature [°C]	Stainless Steel 316 Ti	Hastelloy C	Aluminium alloy	PP	PVDF	ETFE	PPS	FKM	NBR	EPDM	PTFE/FEP	FFKM	
Trichloroethylene	C <sub>2</sub> HCl <sub>3</sub>	50			60	+	+	-	○	+	+ <sup>1)</sup>	+	○	-	-	+	+	
Trichloroethylene	C <sub>2</sub> HCl <sub>3</sub>	TR	1,47		20	+	+	-	○	+	+ <sup>1)</sup>	+	+	-	○	+	+	
Trichloroethylene	C <sub>2</sub> HCl <sub>3</sub>	TR			40	+	+	-	○	+	+ <sup>1)</sup>	+	○	-	-	+	+	
Trichloroethylene	C <sub>2</sub> HCl <sub>3</sub>	TR			60	+	+	-	-	+	+ <sup>1)</sup>	+	○	-	-	+	+	
Trichloromethane					See Chloroform													
Trichlorophenol					See Trichlorobenzene													
Tricresyl Phosphate	PO <sub>4</sub> (C <sub>6</sub> H <sub>4</sub> CH <sub>3</sub> ) <sub>3</sub>	TR	1,13		20	+	+	+	+	+	+	+	-	○	○	+	+	
Tricresyl Phosphate	PO <sub>4</sub> (C <sub>6</sub> H <sub>4</sub> CH <sub>3</sub> ) <sub>3</sub>	TR			40	+	+	+	○	+	+	+	-	-	-	+	+	
Tricresyl Phosphate	PO <sub>4</sub> (C <sub>6</sub> H <sub>4</sub> CH <sub>3</sub> ) <sub>3</sub>	TR			60	+	+	+	○	+	+	+	-	-	-	+	+	
Triethylamine	C <sub>6</sub> H <sub>15</sub> N	TR	0,73	B	20	+	+	+	+	○	+	+	+	-	+	+	+	
Triethylamine	C <sub>6</sub> H <sub>15</sub> N	TR			40	+	+	+	+	○	+	+	+	-	+	+	+	
Triiodinemethane	CHJ <sub>3</sub>				20	+	+	-	+	+	+	+	+	+	○	+	+	
Triiodinemethane	CHJ <sub>3</sub>				40	+	+	-	+	+	+	+	+	+	○	+	+	
Triiodinemethane	CHJ <sub>3</sub>				60	+	+	-	+	+	+	+	+	○	-	+	+	
Trilene					See Trichloroethylene													
Triol					See Butane Triol													
Trisodium Phosphate					See Sodium Phosphate													
Turpentine Oil		H	0,86		20	+	+	+	-	+	+	+	+	+	+	-	+	+
Turpentine Oil		H			40	+	+	+	-	○	+	+	+	+	+	-	+	+
Turpentine Oil		H			60	+	+	+	-	○	+	+	+	+	+	-	+	+
Urea	CH <sub>4</sub> N <sub>2</sub> O	10			20	+	+	+	+	+	+	+	+	+	+	+	+	+
Urea	CH <sub>4</sub> N <sub>2</sub> O	10			40	+	+	+	+	+	+	+	+	+	+	+	+	+
Urea	CH <sub>4</sub> N <sub>2</sub> O	10			60	+	+	+	+	+	+	+	+	+	+	+	+	+
Urea	CH <sub>4</sub> N <sub>2</sub> O	33			20	+	+	+	+	+	+	+	+	+	+	+	+	+
Urea	CH <sub>4</sub> N <sub>2</sub> O	33			40	+	+	○	+	+	+	+	+	+	+	+	+	+
Urea	CH <sub>4</sub> N <sub>2</sub> O	33			60	+	+	○	+	+	+	+	+	+	+	+	+	+
Urine					20	+	+	-	+	+	+	+	+	+	+	+	+	+
Urine					40	+	+	-	+	+	+	+	+	+	+	+	+	+
Urine					60	+	+	-	+	+	+	+	+	+	+	+	+	+
Vinegar		H			20	+	+	○	+	+	+	+	+	-	○	+	+	+
Vinegar		H			40	+	+	○	+	+	+	+	+	-	○	+	+	+
Vinegar		H			60	+	+	-	+	+	+	+	+	-	○	○	+	+
Vinyl Acetate	C <sub>4</sub> H <sub>6</sub> O <sub>2</sub>	TR	0,93	AI	20	+	+	-	+	+	+	+	○	+	○	+	+	+
Vinyl Acetate	C <sub>4</sub> H <sub>6</sub> O <sub>2</sub>	TR			40	+	+	-	○	+	+	+	-	+	○	+	+	+
Vinyl Acetate	C <sub>4</sub> H <sub>6</sub> O <sub>2</sub>	TR			60	+	+	-	○	+	+	+	-	+	○	+	+	+
Vinyl Benzene					See Styrene													
Vinyl Carbinol					See Allyl Alcohol													
Vinyl Cyanide					See Acrylnitrile													
Vinyldenechloride					See Dichloroethylene 1.1													
Water	H <sub>2</sub> O		1,00		20	+	+	+	+	+	+	+	+	+	+	+	+	+
Water	H <sub>2</sub> O				40	+	+	+	+	+	+	+	+	+	+	+	+	+
Water	H <sub>2</sub> O				60	+	+	+	+	+	+	+	+	+	+	+	+	+
Water, distilled	H <sub>2</sub> O		1,00		20	+	+	○	+	+	+	+	+	+	+	+	+	+
Water, distilled	H <sub>2</sub> O				40	+	+	○	+	+	+	+	+	+	+	+	+	+
Water, distilled	H <sub>2</sub> O				60	+	+	○	+	+	+	+	+	+	+	○	+	+
White Spirit				All		+ <sup>1)</sup>	+	-	+ <sup>1)</sup>	+	+	○	+	○	-	+	+	
White Vitriol					See Zinc Sulphate													
Wool Fat					See Lanolin													
Xylene	C <sub>6</sub> H <sub>4</sub> (CH <sub>3</sub> ) <sub>2</sub>	TR	0,86	All	20	+	+	+	-	+	+	+	+	-	-	+	+	+
Xylene	C <sub>6</sub> H <sub>4</sub> (CH <sub>3</sub> ) <sub>w</sub>	TR			40	+	+	+	-	+	+	+	+	○	-	-	+	+

TR = technically pure, GL = saturated solution, H = commercial composition  
 + = resistant, ○ = limited resistance, - = not resistant, <sup>1)</sup> Not resistant on FMC



## Resistance Chart

Description	Chemical Formula	Concentration in %	Density [kg/dm³]	Danger class (VbF)	Temperature [C°]											
					60	+	+	+	-	o	+	+	o	-	+	+
Xylene	C <sub>6</sub> H <sub>4</sub> (CH <sub>3</sub> ) <sub>2</sub>	TR			20	+	+	-	+	+	+	+	+	+	+	+
Zinc Chloride	ZnCl <sub>2</sub>	20	1,19		20	+	+	-	+	+	+	+	+	+	+	+
Zinc Chloride	ZnCl <sub>2</sub>	20			40	+	+	-	+	+	+	+	+	+	+	+
Zinc Chloride	ZnCl <sub>2</sub>	20			60	+	+	-	+	+	+	+	+	+	+	+
Zinc Chloride	ZnCl <sub>2</sub>	75	2,07		20	-	+	-	+	+	+	+	+	+	+	+
Zinc Chloride	ZnCl <sub>2</sub>	75			40	-	+	-	+	+	+	+	+	+	+	+
Zinc Chloride	ZnCl <sub>2</sub>	75			60	-	+	-	+	+	+	+	+	+	+	+
Zinc Sulphate	ZnSO <sub>4</sub>	10	1,11		20	+	+	o	+	+	+	+	+	+	+	+
Zinc Sulphate	ZnSO <sub>4</sub>	10			40	+	+	o	+	+	+	+	+	+	+	+
Zinc Sulphate	ZnSO <sub>4</sub>	10			60	+	+	o	+	+	+	+	+	o	+	+
Zinc Sulphate	ZnSO <sub>4</sub>	GL	1,38		20	+	+	o	+	+	+	+	+	+	+	+
Zinc Sulphate	ZnSO <sub>4</sub>	GL			40	+	+	o	+	+	+	+	+	+	+	+
Zinc Sulphate	ZnSO <sub>4</sub>	GL			60	+	+	-	+	+	+	+	+	o	+	+

TR = technically pure, GL = saturated solution, H = commercial composition  
+ = resistant, o = limited resistance, - = not resistant, <sup>1)</sup> Not resistant on FMC

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