T24: Chemical resistance of plastic materials

## T24 Technical Tables

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	C	able ar	nd lead	designa	ation	
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The information is given to						е
the best of our knowledge						Jan
and experience, but must						et
be regarded as being for						<u></u>
the guidance only. A defi-			9	9.9	12	8
nite judgement depends in most cases on tests under		O	PA	₽	l A	tic
actual working conditions.		°+	ge	ge	ge	olas
dotadi working conditions.		운	E E	E E	<u> </u>	ομ
		at temp +°C	Polyamide PA 6	Polyamide PA 6.6	Polyamide PA 12	Thermoplastic Polyurethane PU
	concen-	Ö	<u> </u>	<u>a</u>	ا م	F
Reagens	tration					
Exhaust gases, containing carbon dioxide	any	60				
Waste gas, containing SO	low	60				
Acetaldehyde	40%	20				
Acetone	100%	20				П
Acrylic acid	100%	> 30		_		
Alums, hydrous	dilute	40				
Allyl alcohol	96%	20				
Aluminum chloride, hydrous	dilute	40	_			_
Aluminum sulphate, h.	dilute	40				
Formic acid, hydrous	10%	20		7		
Ammonia solution, h.	saturated	20	20%	20%	20%	
Ammonium chloride, h.	saturated	60		T		3% 🗸
Ammonium nitrate, h.	dilute	40				
Ammonium sulphate, h.	dilute	40				
Aniline, pure	100%	20				
Anilin hydrochloride, h.	saturated					
Benzaldehyde, hydrous	saturated	20	pure 🗾	pure 🚄	pure 🔼	
Benzine	100%	20				
Benzoic acid, hydrous	any	40	20% 🚄	20% 🔼		
Benzole	100%	20				
Bleaching liquor	12.5 CI	20				3% □
Drilling oil	any	20				
Chrome alum, hydrous	dilute	40				
Cyclohexanol	-	20				
Diesel fuel		85				20 °C
Potassium chloride, hydrous	10%	20				
Acetic acid	100%	20				
Ethanoic acid	10%	20				3% 🔽
Ehtyl alcohol, hydrous	10%	20	40 Vol%	40 Vol%	40 Vol%	
Ethyl dichloride	100%	20			_	
Ethylenoxid	100%	20				
Ehtyl ether	100%	20				
Ferric cyanide, hydrous	saturated	60				

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	С	able an	d lead	designa	ation	
The information is given to the best of our knowledge and experience, but must be regarded as being for the guidance only. A definite judgement depends in most cases on tests under actual working conditions.		temp +°C	lyamide PA 6	lyamide PA 6.6	lyamide PA 12	ermoplastic Polyurethane PU

the guidance only. A defi- nite judgement depends in most cases on tests under actual working conditions.		at temp +°C	Polyamide PA 6	Polyamide PA 6.0	Polyamide PA 12	Thermoplastic Po
Reagens	concen- tration					
Fluorine	50%	40	pure 🗌	pure 🗌	pure 🗌	
Formaldehyde, hydrous	dilute	40	pure 🔳	pure 🔳	pure 🚄	
Glucose, hydrous	any	50				
Urea, hydrous	to 10%	40	20%	20%	20 %	
Hydraulic fluid hardly inflammable	80%	80	•	•		
Hydraulic oil H and HL (DIN 51524)	100%	100				
Hydroxylamine sulphate, hydrous	to 12%	30				
Caustic soda lye, hydrous	50%	20				
Potassium bromide, hydrous	any	20	10% 🔳	10 % 🔳	10 % 🔳	
Potassium chloride, hydrous	10%	20				
Potassium dichromate, hydrous	40%	20	5% 🗷	5% 🗷	5 % 🚄	
Potassium nitrate, hydrous	any	20	10%	10 %	10 %	
Kaliumpermanganat, hydrous	saturated	20				
Hydrosilicofluoric acid, h.	to 30%	20				
Carbon dioxide, dry	100%	60				
Carbon dioxide	100%	60				
Cresol, hydrous	to 90%	20	pure 🗌	pure 🗌		
Cooling liquids DIN 53521		120				
Copper monochloride, h.	saturated	20				
Copper sulphate, hydrous	saturated	60				
Magnesium carbonate, h.	saturated	100				
Magnesium chloride, h.	saturated	20	10 % 🔳	10 % 🔳	10 % 🔳	
Methyl alcohol	100%	20				
Methylene chloride	100%	20				
Lactic acid, hydrous	to 90%	20	10 % 🔳	10 % 🔳	10 % 🔳	3 % 🔼
Mineral oil						
Sodium chlorate, hydrous	saturated	20	10 % 🔼	10 % 🚄	10 % 🔼	
Caustic soda, hydrous	10%	20				3 % 🚄
Nickel chloride, hydrous	saturated	20	10 % 🔼	10 % 🚄	10 % 🔼	
Nickel sulphate, hydrous	saturated	20	10 % 🚄	10 % 🚄	10 % 🚄	

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Cable and lead designation								
The information the best of our and experience be regarded at the guidance nite judgemer most cases or actual working	r knowledge ce, but must as being for only. A defi- nt depends in n tests under		at temp +°C	Polyamide PA 6	Polyamide PA 6.6	Polyamide PA 12	Thermoplastic Polyurethane PU	
Reagens		concen- tration						
Nitro glycerin		dilute	20					
Oil and grease	Э		20					
Oleic acid		-	20					
Oxalic acid		any	20	10 % 🔼	10 % 🔼	10 % 🔼	3 % 🔼	
Ozone		pure						
Kerosine		100%	80					
Phosgene, gas	seous	100%	20					
Phosphoric ac		dilute	20	10 % 🖂	10 % 🖂	10 % □	3 % 🔼	
Phosphorus p		100%	20					
Mercury		pure	20					
Nitric acid, hy	drous	50%	20				3%□	
Hydrochlorid		30%	20	20 % 🗆	20 % 🔲	20 % 🗆	3 % 🗆	
Lubricating gr base diester of			110					
Lubricating gr base polypher			110					
Lubricating gr base silicon o			110					
Carbon bisulp	hide	100%	20					
Sulphuric sod	ium, liquid	dilute	40					
Sulphuric acid	d, hydrous	10%	20				3 % 🔲	
Sea water			40	-			20 °C	
Soap solution	, hydrous	any	20	dilute 🔳	dilute 🔳	dilute 🔳		
Carbon tetrac	hloride	100%	20					
Toluene		100%	20					
Trichloroethyle	ene	100%	20					
Vinyl acetate		100%	20					
Hydrogen		100%	60	20 °C	20 °C	20 °C		
Xylene		100%	20					
Zinc chloride,	hydrous	dilute	60	10 % 🔼	10 % 🔼			
Zinc sulfate, h	,	dilute	60					
Zinc chloride,	-	dilute	40					
	, arous			20 °C	20 °C	20 °C		
Citric acid		to 10%	40	200	1	200	3 % 🚄	

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	C	able an	d lead	design	ation	
	·	able all	u ieau	uesigii	ation	
The information is given to the best of our knowledge and experience, but must be regarded as being for the guidance only. A definite judgement depends in most cases on tests under actual working conditions.		Polypropylene PP	Polyethylene HD-PE	Polyethylene LD-PE	Polystyrole PS	Nitrile Butadiene rubber NBR
Reagens	concen- tration					
Exhaust gases, containing carbon dioxide	any					
Waste gas, containing SO <sub>2</sub>	low					
Acetaldehyde	40%					20 °C
Acetone	100%					
Acrylic acid	100%					
Alums, hydrous	dilute					20 °C
Allyl alcohol	96%			20 %		
Aluminum chloride, hydrous	dilute					20 °C
Aluminum sulphate, hydrous	dilute					20 °C
Formic acid, hydrous	10%					
Ammonia solution, hydrous	saturated				25 % 🔳	20 °C
Ammonium chloride, hydrous	saturated					
Ammonium nitrate, hydrous	dilute					20 °C
Ammonium sulphate, hydrous	dilute	10			5	
Aniline, pure	100%					
Anilin hydrochloride, h.	saturated					
Benzaldehyde, hydrous Benzine	saturated 100%					
Benzoic acid, hydrous	any					
Benzole	100%					
Bleaching liquor	12.5 CI					
Drilling oil	any					20 °C
Chrome alum, hydrous	dilute					20 °C
Cyclohexanol	-					

20 °C | 20 °C | 20 °C

10%

100%

Diesel fuel Potassium chloride, h.

Acetic acid

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Reagens	concen- tration					
Ethanoic acid Ehtyl alcohol, hydrous Ethyl dichloride Ethylenoxid Ethyl ether Ferric cyanide, hydrous Fluorine	10% 10% 100% 100% 100% saturated 50%					
Formaldehyde, hydrous	dilute	40%■	40%■	40%■	30%■	20 °C
Glucose, hydrous Urea, hydrous Hydraulic fluid hardly inflammable	any to 10% 80%					
Hydraulic oil H and HL (DIN 51524) Hydroxylamine sulphate,	100% to 12%					
hydrous Caustic soda lye, hydrous	50%					
Potassium bromide, hydrous	any					
Potassium chloride, hydrous	10%					
Potassium dichromate, hydrous	40%			-		
Potassium nitrate, hydrous Kaliumpermanganat,	any saturated					
hydrous Hydrosilicofluoric acid, hydrous	to 30%					
Carbon dioxide, dry	100%				50 °C	20 °C
Carbon dioxide	100%					20 °C
Cresol, hydrous Cooling liquids DIN 53521 Copper monochloride, h.	to 90%					
Copper sulphate, hydrous	saturated					20 °C

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h. = hydrous

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The information is given to the best of our knowledge and experience, but must be regarded as being for the guidance only. A definite judgement depends in most cases on tests under actual working conditions.		Polypropylene PP	Polyethylene HD-PE	Polyethylene LD-PE	Polystyrole PS	Nitrile Butadiene rubber NBR
Reagens	concen- tration					
Magnesium carbonate, hydrous Magnesium chloride,	saturated	•			50 °C	_
hydrous	saturated	40.00				
Methyl alcohol	100%	40 °C				
Methylene chloride Lactic acid, hydrous	100% to 90%				80%	
Mineral oil		20 °C	20 °C	20 °C		
Sodium chlorate, hydrous Caustic soda, hydrous Nickel chloride, hydrous Nickel sulphate, hydrous Nitro glycerin	saturated 10% saturated saturated dilute				•	•
Oil and grease Oleic acid Oxalic acid	- any					
Ozone Kerosine	pure 100%	20 °C	20 °C	20 °C		
Phosgene, gaseous Phosphoric acid, hydrous Phosphorus pentoxide	100% dilute 100%				86%	
Mercury Nitric acid, hydrous Hydrochlorid acid, hydrous Lubricating grease,	pure 50% 30%				30 % III	
base diester oil Lubricating grease, base polyphenyl ester Lubricating grease, base silicon oil						
Carbon bisulphide Sulphuric sodium, liquid Sulphuric acid, hydrous Sea water	100% dilute 10%	50%	50%	50%		20 °C

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Reagens	concen- tration									
Soap solution, hydrous Carbon tetrachloride Toluene Trichloroethylene Vinyl acetate Hydrogen Xylene Zinc chloride, hydrous Zinc sulfate, hydrous Zinc chloride, hydrous	any 100% 100% 100% 100% 100% dilute dilute				50 °C	20 °C 20 °C 20 °C 20 °C				
Citric acid	to 10%					20 °C				

= not consistent

= provisory consistent

= consistent