

Chemische Verträglichkeit von Fläschchen und Verschlussmaterialien

Legende zum Diagramm

E – Kein Schaden nach 30 Tagen konstanter Einwirkung.
 G – Geringer oder kein Schaden nach 30 Tagen konstanter Einwirkung.
 F – Leichte Wirkung nach 7 Tagen konstanter Einwirkung.

N- Sofortiger Schaden ist möglich. Nicht für Daueranwendungen empfohlen.
 S – Oberfläche.
 Der erste Buchstabe eines jeden Paares gilt für Mindesttemperaturbedingungen, der zweite für Maximaltemperaturbedingungen.

Chemische	LDPE	HDPE	PP	PTFE	TPX	Glas-
Acetaldehyd	GN	GF	GN	EE	GN	EE
Acetamid, Sat.	EE	EE	EE	EE	EE	EE
Essigsäure, 5 %	EE	EE	EE	EE	EE	EE
Essigsäure, 50%	EE	EE	EE	EE	EE	EE
Essigsäure, Eisessig	EG	EE	EG	EE	EE	EE
Essigsäureanhydrid	NN	FF	GF	EE	EG	EE
Aceton	NN	NN	EG	EE	EE	EE
Acetonitril	EE	EE	FN	EE	FN	EE
Acetophenon	NN	FF	FF	EE	GN	EE
Acrylonitril	EE	EE	FN	EE	FN	EE
Adipinsäure	EG	EE	EE	EE	EE	EE
Allylkohol	EE	EE	EE	EE	EG	EE
Aluminiumhydroxid	EG	EE	EG	EE	EG	SS
Aminosäuren	EE	EE	EE	EE	EE	EE
Ammoniak	EE	EE	EE	EE	EE	SS
Ammoniak, 25 %	EE	EE	EE	EE	EE	SS
Ammoniumglykolat	EG	EE	EG	EE	EG	EE
Ammoniumhydroxid, 30 %	EG	EE	EG	EE	EG	SS
Ammoniumhydroxid, 5 %	EE	EE	EE	EE	EE	SS
Ammoniumoxalat	EG	EE	EG	EE	EG	EE
Ammoniumsalze	EE	EE	EE	EE	EE	EE
Amylkohol	EE	EE	EE	EE	EE	EE
Amylchlorid	NN	FN	EE	EE	NN	EE
Anilin	EG	EG	NN	EE	GF	EE
Königswasser	NN	NN	GF	EE	NN	SS
Arsensäure	GF	EG	NN	EE	EE	EE
Benzaldehyd	EG	GN	EE	EE	EG	EE
Benzolamin	EG	EG	EG	EE	GF	EE
Benzol	NN	NN	NN	EE	GF	EE
Benzoesäure, Sat.	EE	EE	EG	EE	EG	EE
Benzylacetat	EG	EE	EG	EE	EG	EE
Benzylalkohol	NN	FN	NN	EE	NN	EE
Borsäure	EE	EE	EE	EE	EE	EE
Brom	NN	FN	NN	EE	NN	EE
Brombenzol	NN	NN	NN	EE	NN	EE
Bromoform	NN	NN	NN	EE	NN	EE
Bromobenzol	NN	NN	NN	EE	NN	EE
Bromoform	NN	NN	NN	EE	NN	EE
Butadien	NN	FN	NN	EE	NN	EE
2-Butanol	EE	EE	EE	EE	EG	EE
Butylacetat	NN	FF	FF	EE	GF	EE
Butylchlorid	NN	NN	NN	EE	FN	EE
Butansäure	NN	FN	NN	EE	NN	EE
Calciumhydroxid	EE	EE	EE	EE	EE	SS
Calciumhypochlorit	EE	EE	EE	EE	EG	EE
Carbazol	EE	EE	EE	EE	EE	EE
Schwefelkohlenstoff	NN	NN	NN	EE	NN	EE
Kohlenstofftetrachlorid	FN	GF	GF	EE	NN	EE
Cellosolve-Acetat	EG	EE	EG	EE	EG	EE
Chlorwasser	GN	GF	FN	EE	GF	EE
Chlor, 10 % feucht	GN	GF	FN	EE	GN	EE
Chlor, 10 % in der Luft	GN	EF	GN	EE	GN	EE
Chlor, Feuchtgas	GN	GF	FN	EE	GN	EE
Chloressigsäure	EE	EE	EG	EE	EG	EE
Chlorbenzol	NN	NN	NN	EE	FN	EE
Chloroform	FN	FN	NN	EE	NN	EE
Chromsäure, 10 %	EE	EE	EE	EE	EE	EE

Chemische	LDPE	HDPE	PP	PTFE	TPX	Glas-
Chromsäure, 20%	EE	EE	GG	EE	EE	EE
Chromsäure, 50%	EE	EE	GF	EE	GF	EE
Chrom: Schwefelsäure-Gemisch, 96 %	NN	NN	NN	EE	NN	EE
Zitronensäure, 10 %	EE	EE	EE	EE	EE	EE
Cresol	NN	FN	GF	EE	NN	EE
Cyclohexan	FN	FN	FN	EE	NN	EE
Cyclohexanon	NN	FN	FN	EE	GF	EE
Cyclopentan	NN	FN	FN	EE	FN	EE
Decahydronaphthalin	GF	EG	GF	EE	FN	EE
Diaceton	NN	NN	GF	EE	FF	EE
Diacetonalkohol	FN	EE	EF	EE	EE	EE
Dibutylphthalat	--	-N	NN	EE	GG	EE
1,2-Dichlorethan	NN	NN	NN	EE	NN	EE
2,4-Dichlorphenol	NN	NN	NN	EE	FN	EE
Diethylbenzol	NN	FN	NN	EE	NN	EE
Diethylether	NN	FN	NN	EE	NN	EE
Diethylketon	NN	NN	GG	EE	GF	EE
Diethylmalonat	EE	EE	EE	EE	EG	EE
Diethylamin	NN	FN	GN	EE	FF	EE
Diethylendioxid	GF	GG	GF	EE	FN	EE
Diethylenglycol	EE	EE	EE	EE	EE	EE
Dimethylacetamid	FN	EE	EE	EE	FG	EE
Dimethylformamid	EE	EE	EE	EE	EE	EE
Dimethylsulfoxid (DMSO)	EE	EE	EE	EE	EE	EE
Dioxan	GF	GG	GF	EE	FN	EE
1,4-Dioxan	GF	GG	GF	EE	GF	EE
Dipropylenglycol	EE	EE	EE	EE	EE	EE
Ethanol, 40 %	EG	EE	EG	EE	EG	EE
Ether	NN	FN	NN	EE	NN	EE
Ethylacetat	EE	EE	EG	EE	FN	EE
Ethylalkohol (absolut)	EG	EE	EG	EE	EG	EE
Ethylalkohol, 40 %	EG	EE	EE	EE	EG	EE
Ethylalkohol, 96%	EG	EG	EE	EE	EG	EE
Ethylbenzol	NN	NN	NN	EE	NN	EE
Ethyl-benzoat	FF	GG	GF	EE	GF	EE
Ethyl-benzoat	FF	GG	GF	EE	GF	EE
Ethylbutyrat	GN	GF	GN	EE	FN	EE
Ethylchlorid	FN	FF	FN	EE	FN	EE
Ethylchlorid, flüssig	FN	FF	FN	EE	FN	EE
Ethylcyanoacetat	EE	EE	EE	EE	EE	EE
Ethylacetat	EE	EE	EE	EE	EE	EE
Ethylenchlorid	GN	GF	FN	EE	NN	EE
Ethylenglykol	EE	EE	EE	EE	EE	EE
Ethylenoxidgas	FF	GF	FF	EE	FN	EE
Ethylenoxid, 100 %	FF	GF	FF	EE	FN	EE
Fettsäuren	EG	EE	EG	EE	EG	EG
Fluor	FN	GN	FN	EG	FN	FN
Formaldehyd, 10 %	EE	EE	EE	EE	EG	EG
Formaldehyd, 40%	EG	EE	EG	EE	EG	EG
Formalin, 10 %	EE	EE	EE	EE	EG	EG
Formalin, 40%	EG	EE	EG	EE	EG	EG
Ameisensäure	EG	EE	EG	EE	EF	EF
Ameisensäure, 3 %	EG	EE	EG	EE	EG	EG
Ameisensäure, 50%	EG	EE	EG	EE	EG	EG
Ameisensäure, 85%	EE	EE	EG	EE	EF	EF
Ameisensäure, 100%	EG	EE	EG	EE	EF	EF
Freon TF	EG	EG	EG	EE	FN	FN

Chemische Verträglichkeit von Fläschchen und Verschlussmaterialien (Fortsetzung)

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Chemische	LDPE	HDPE	PP	PTFE	TPX	Glas-
Glutaraldehyd	EG	EE	EE	EE	FF	FF
Glycerin (Glyzerol)	EE	EE	EE	EE	EE	EE
Hexan	NN	GF	GF	EE	FN	FN
Hydrazin	NN	NN	NN	EE	NN	NN
Bromwasserstoffsäure, 4 %	EG	EE	EG	EE	EG	EG
Bromwasserstoffsäure, 48%	EE	EE	EE	EE	EE	EE
Bromwasserstoffsäure, 69%	--	-N	EG	EE	EE	EE
Salzsäure, 5 %	EE	EE	EE	EE	EG	EG
Salzsäure, 20%	EE	EE	EE	EE	EG	EG
Salzsäure, 35%	EE	EE	EG	EE	EG	EG
Wasserstoffperoxid, 3%	EE	EE	EE	EE	EE	EE
Wasserstoffperoxid, 30 %	EG	EE	EG	EE	EG	EG
Wasserstoffperoxid, 90%	EG	EE	EG	EE	EG	EG
Jodkristalle	NN	NN	FN	EE	GN	GN
Jodtinktur	EG	EG	GG	EE	NN	EE
Isobutanol	EE	EE	EE	EE	EG	EG
Isopropanol, 100 %	EE	EE	EE	EE	EE	EE
Isopropylacetat	GF	EG	GF	EE	GF	GF
Isopropylbenzol	FN	GF	FN	EE	NN	NN
Isopropylether	NN	NN	NN	EE	EE	EE
Milchsäure, 3 %	EG	EE	EG	EE	EG	EG
Milchsäure, 85%	EG	EE	EG	EE	EG	EG
Quecksilber	EE	EE	EE	EE	EE	EE
Methanol, 100 %	EE	EE	EE	EE	EE	EE
2-Methoxyethanol	EG	EE	EE	EE	EE	EE
Methoxyethylolcat	EG	EE	EG	EE	EG	EG
Methylacetat	FN	FF	GF	EE	EE	EE
Methylethylketon	NN	NN	EG	EE	NN	NN
Methylisobutylketon	NN	NN	GF	EE	FF	FF
Methylpropylketon	GF	EG	GF	EE	FF	FF
Methylenchlorid	FN	FN	FN	EE	FN	FN
Propangas	NN	FN	NN	EE	NN	EE
2-Propanol	EE	EE	EE	EE	EE	EE
Propionsäure	FN	EF	EG	EE	EF	EE
Propylenglycol	EE	EE	EE	EE	EE	EE
Propylenoxid	EG	EE	EG	EE	EG	EE
Pyridin	NN	NN	NN	EE	NN	EE
Resorcinol, 5 %	EE	EE	EE	EE	EE	EE
Resorcinol, Sat.	EE	EE	EE	EE	EE	EE
Salicylaldehyd	EG	EE	EG	EE	EG	EE
Salicylsäure, Sat.	EE	EE	EE	EE	EE	EE
Salzlösungen, Metallisch	EE	EE	EE	EE	EE	SS
Silikonöl	EG	EE	EE	EE	EE	EE
Silbernitrat	EG	EE	EG	EE	EE	EE
Natriumdichromat	EE	EE	EE	EE	EE	EE
Natriumhydroxid, 1 %	EE	GF	EE	EE	EE	SS

Chemische	LDPE	HDPE	PP	PTFE	TPX	Glas-
Natriumhydroxid, 10%	EE	GF	EE	EE	EE	SS
Natriumhydroxid, 50%	GG	GF	EE	EE	EE	SS
Natriumhypochlorid, 15 %	EE	EE	GF	EE	EE	EE
Stearinsäure	EE	EE	EE	EE	EE	EE
Schwefeldioxid	NN	FN	NN	EE	NN	EE
Schwefeldioxid, nass oder trocken	EE	EE	EE	EE	EE	EE
Schwefelsalze	FN	GF	FN	EE	FN	EE
Schwefelsäure, 6 %	EE	EE	EE	EE	EE	EE
Schwefelsäure, 20%	EE	EE	EG	EE	EG	EE
Schwefelsäure, 30%	EE	EE	GG	EE	EG	EE
Schwefelsäure, 60%	EG	EE	EG	EE	EG	EE
Schwefelsäure, 96%	GG	GG	FN	EE	GG	EE
Schwefelsäure, 98%	GG	GG	FN	EE	GG	EE
Weinsäure	EE	EE	EE	EE	EE	EE
Tetrahydrofuran	FN	GF	GF	EE	FF	EE
Thionylchlorid	NN	NN	NN	EE	NN	EE
Toluol	FN	FN	FN	EE	FF	EE
Tributylcitrat	GF	EG	GF	EE	GF	EE
Trichloressigsäure (TCA)	FN	FF	FN	EE	EE	EE
1,2,4-Trichlorbenzol	NN	NN	NN	EE	GF	EE
Trichlorethan	NN	FN	NN	EG	NN	EE
Trichlorethylen	NN	FN	NN	EE	NN	EE
Triethylenglycol	EE	EE	EE	EE	EE	EE
2,2,4-Trimethylpentan	FN	FN	FN	EE	FN	EE
Tripropylenglycol	EE	EE	EE	EE	EE	EE
Tris-Puffer, Lösung	EG	EG	EG	EE	EG	EE
Harnstoff	EE	EE	EE	EE	EE	EE
Xylol	GN	GF	FN	EE	NN	EE

Austria: +43(0)800-20 88 40 Belgium: +32 (0)56 260 260 Denmark: +45 70 27 99 20
 Germany: +49 (0)2304 9325 Ireland: +353 (0)1 885 5854 Italy: +39 02 950 59 478
 Finland: +358 (0)9 8027 6280 France: +33 (0)3 88 67 14 14 Netherlands: +31 (0)20 487 70 00
 Norway: +47 22 95 59 59 Portugal: +351 21 425 33 50 Spain: +34 902 239 303
 Sweden: +46 31 352 32 00 Switzerland: +41 (0)56 618 41 11 UK: +44 (0)1509 555 500

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