

CHEMICAL RESISTANCE LIST

RESISTANCE TO DEGRADATION						SUBSTANCE	PERMEATION TIME/LEVEL													
NR	CR	CR NBR	NBR	FKM	IIR		chemical	physical state	natural latex		chloro-prene	nitrile/chloroprene		nitrile			Fluoro-carbon rubber	butyl		
						NR			NR	CR	CR	CR	NBR	NBR	NBR	NBR	NBR	FKM	IIR	IIR
								395	450, 451	720, 722	717	727	730, 732	740, 741	743	754	764	890	897	898
								403	706	723, 725			733, 836	742, 757						
									708	726			736-739	759						
-	0	-	0	0	+	1-methoxy-2-propanol	paste	4	2	2	3	4	4	B	1	3		4	6	6
-	0	-	0	0	+	1-methoxy-2-propyl acetate	liquid	3	1	1	3		3	A	B	2		3	6	6
-	0	0	-	0	+	1-methyl-2-pyrrolidone	liquid	5	2	3	3	3	2	A	B	1	3	3	6	6
-	0	+	+	+	-	1,1,2-trichlorotrifluoroethane	liquid	1	0	5	4	6	6	1	1	2	1	6	1	2
-	-	-	-	-	-	1,2-epoxy ethane (ethylene oxide)	liquid	B	A	A	A		A	0	0	0		B	1	2
-	-	-	-	-	-	1,2-epoxy propane (propylene oxide)	liquid	B	A	A	A	1	A	0	0	0		B	1	2
+	+	+	+	+	+	1,2-propanediol	liquid	6	6	6	6	6	6	6	6	6	6	6	6	6
-	+	-	+	+	0	2-ethyl hexyl acrylate	liquid	2	1	1	5		6	1	1	2		6	2	3
-	0	0	0	+	+	2-mercaptoethanol	liquid	3	2	4	4	4	4	1	1	3		6	6	6
-	-	-	0	0	-	2-methoxy-2-methyl propane	liquid	1	B	B	2		4	A	1	4	1	3	2	2
-	-	-	-	-	0	3-hexanone	liquid	1	B	1	1	1	0	0	0	0		0	3	3
-	-	-	-	-	0	4-heptanone	liquid	1	A	1	1	1	A	0	0	0		B	3	3
-	-	-	-	-	+	acetaldehyde	liquid	1	1	1	1	B	0	0	0	A		0	6	6
0	0	0	-	-	+	acetic acid anhydride	liquid	6	3	3	3	3	2	A	B	1	B	2	6	6
+	+	+	+	+	+	acetic acid, 10%	liquid	6	6	6	6	6	6	6	6	6	6	6	6	6
0	+	+	+	+	+	acetic acid, 50%	liquid	5	4	6	6	6	6	2	4	6		6	6	6
-	-	-	-	0	+	acetic acid, conc. (glacial acetic acid)	liquid	3	2	2	2	2	2	A	B	2	1	3	6	6
-	-	-	-	-	+	acetone p.a.	liquid	2	1	1	1	2	B	A	A	A	B	B	6	6
-	-	-	-	-	0	acetone/toluene (50:50)	liquid	1	A	A	B	1	B	0	A	A		1	2	3
-	0	-	-	-	0	acetonitrile	liquid	2	1	1	3	B	B	A	A	A	B	1	6	6
-	-	-	-	-	0	acetyl chloride for synthesis	liquid				B	1		B	0	A	A	1	4	3
-	-	-	-	-	+	ACETYLACETONE	liquid	1	0	1	1		1	0	0	B	0	1	4	5
-	0	0	0	+	+	acrylic acid (very high purity)	liquid	3	2	3	4		4	1	2	3		6	6	6
-	-	-	-	-	+	ACRYLONITRILE	liquid	1	1	2	2	3	1	0	B	B		1	6	6
-	0	-	0	+	-	Alexit structural paint Z 421	liquid	1	A	B	3	4	4	A	B	3		6	1	1
-	-	-	-	0	0	Alexit thinners / Thinner 62 colourless	liquid	1	0	0	1		2	A	A	1		3	3	3
+	+	+	+	+	+	amidosulphonic acid	solid	6	6	6	6		6	6	6	6	6	6	6	6
-	+	0	+	+	+	ammoniac (ammonium hydroxide), 25%	liquid	2	1	3	5	5	5	1	3	4	3	6	6	6
0	0	0	+	+	+	ammoniac, 10%	liquid	3	3	4	4	6	6	6	6	6		6	6	6
-	-	-	0	+	+	aniline oil (ATE 8006)	liquid	3	B	1	1	6	3	1	2	2		6	6	6
-	0	-	+	+	+	anise oil (ATE 8004)	liquid	3	1	2	4	6	6	2	3	5		6	6	6
0	+	0	+	+	0	Anticorit DWS	liquid	4	3	3	5	6	6	1	1	2		6	3	4
+	+	+	+	+	+	Antifrogen N	liquid	6	6	6	6	6	6	6	6	6		6	6	6
+	+	+	+	+	+	Antox 71 E	liquid	6	6	6	6		6	4	5	6		6	6	6
0	+	0	+	+	0	Aral Vitam (various ranges)	liquid	4	3	3	5	6	6	2	3	5		6	3	4
+	+	+	+	+	+	ARALDITE AV 138 M (Vantico)	paste	6	6	6	6	6	6	6	6	6		6	6	6
-	+	0	+	+	+	Bacillot plus	liquid	2	2	3	5	6	6	1	3	5	5	6	6	6
-	+	-	+	+	+	Ballistol oil and spray	liquid	2	1	2	5		6	1	2	4		6	1	2
+	+	+	+	+	+	battery acid (sulphuric acid, 25%)	liquid	6	6	6	6	6	6	4	4	6		6	6	6
-	-	-	-	+	+	benzaldehyde	liquid	3	1	2	1	1	1	0	0	1		6	6	6
-	-	-	-	+	-	benzene	liquid	1	A	1	1		1	0	A	B	A	6	1	1
+	+	+	+	+	+	BENZOIC ACID	solid	6	6	6	6	6	6	6	6	6		6	6	6
-	-	-	-	0	+	benzyl alcohol	liquid	1	1	1	2	3	2	0	1	1		4	6	6
+	+	+	+	+	+	bis(2-ethyl hexyl) phthalate	liquid	6	5	6	6	6	6	4	6	6		6	6	6
+	+	+	+	+	+	boric acid, saturated	liquid	6	6	6	6	6	6	6	6	6		6	6	6
-	+	-	+	+	-	brake cleaner fluid - active ingredient (Weicon)	liquid	1	B	1	5		6	1	1	2		6	1	2
+	+	+	+	+	+	brake fluid DOT 4	liquid	6	6	6	6	6	6	1	3	5		6	6	6
-	-	-	-	+	-	bromine	liquid	A	A	A	A	A	A	0	0	0		6	1	1
+	+	+	+	+	+	Butanox M-50	liquid	6	6	6	6		6	3	5	6		6	6	6
-	-	-	-	-	0	butyl acetate (acetic acid butyl ester)	aerosol	2	B	1	2	3	2	A	B	1	B	1	3	3
-	-	-	-	-	+	butyl acrylate	liquid	1	B	B	B		1	A	A	1		2	6	6
-	+	+	+	+	+	butyl alcohol (1-butanol)	liquid	4	1	5	6	6	6	1	2	5		6	6	6
-	0	+	+	+	+	butyl diglycol	liquid	3	2	5	4		6	1	2	4		6	6	6
-	0	0	+	+	+	butyl diglycol acetate	liquid	4	2	3	4		6	1	2	4		6	6	6
-	0	-	0	0	0	butyl methacrylate	liquid	2	B	1	3	4	4	A	B	3		3	3	3
-	-	-	-	0	-	butylamine (1-aminobutane)	liquid	1	0	1	2		1	0	0	B		3	1	2
+	+	+	+	+	+	calcium hydroxide	solid	6	6	6	6		6	6	6	6	6	6	6	6
-	-	-	-	+	-	carbon disulphide	liquid	A	A	A	A	2	B	0	A	A	A	6	A	B
-	0	-	+	+	-	carbon tetrachloride (tet)	liquid	1	1	1	4		5	1	1	4		6	1	2
+	+	+	+	+	+	caustic potash, 10%	liquid	6	6	6	6		6	6	6	6		6	6	6
+	+	+	+	+	+	caustic potash, saturated	liquid	6	6	6	6		6	6	6	6		6	6	6

Swelling after 8 hours:
 + resistant - non resistant
 0 partially resistant

Level 0 0 min. Level 1 ≥10 min. Level 4 ≥120 min.
 Level A 1-5 min. Level 2 ≥30 min. Level 5 ≥240 min.
 Level B 5-10 min. Level 3 ≥60 min. Level 6 ≥480 min.

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								395	450, 451	720, 722	717	727	730, 732	740, 741	743	754	764	890	897	898
								403	706	723, 725			733, 836	742, 757						
									708	726			736-739	759						
+	+	+	+	+	+	caustic soda 0-10 % solution	liquid	6	6	6	6	6	6	6	6	6	6	6	6	6
+	+	+	+	+	+	caustic soda 10-30 % solution	liquid	6	6	6	6	6	6	6	6	6	6	6	6	6
+	+	+	+	+	+	caustic soda 50 %	liquid	6	6	6	6	6	6	6	6	6	6	6	6	6
+	+	+	+	+	+	caustic soda, saturated	liquid	6	6	6	6	6	6	6	6	6	6	6	6	6
-	-	-	-	+	-	chlorobenzene	liquid	1	B	B	1	1	1	0	A	B	B	6	1	1
-	-	-	-	+	-	chloroform (trichloro methane)	liquid	1	A	A	A	A	A	0	A	A	A	6	1	1
-	0	0	-	+	0	chromic acid 50 %	liquid	2	1	4	3	4	2	0	0	1		6	3	4
+	+	+	+	+	+	chromic-sulphuric acid, 10 %	liquid	6	6	6	6	6	6	0	0	0		6	6	6
-	0	0	0	+	+	chromic-sulphuric acid, conc.	liquid	4	2	3	4		3	1	2	2	1	6	6	6
+	+	+	+	+	+	citric acid, saturated aqueous	liquid	6	6	6	6	6	6	6	6	6		6	6	6
-	-	-	-	0	-	Colorex 31 high-performance paint stripper	liquid	B	A	A	A	A	0	A	0		4	B	1	
-	+	-	+	+	-	cyclohexane	liquid	2	B	1	5	6	6	2	3	5	3	6	2	2
0	+	+	+	+	+	cyclohexanol	liquid	4	3	6	6	6	6	3	4	6		6	6	6
-	-	-	-	0	+	cyclohexanone	liquid	3	2	2	2		2	A	B	1	1	4	6	6
-	0	-	0	+	0	cyclohexylamine	liquid	3	2	2	3		3	0	1	2		6	3	4
0	0	0	0	+	+	diacetone alcohol (4-hydroxy-4-methyl-2-pentanone)	liquid	6	4	3	4		4	1	2	3	2	5	6	6
-	-	-	+	+	-	dibutyl amine	liquid	2	1	2	2		6	0	1	3		6	2	2
+	+	+	+	+	+	dibutyl phthalate (DBP)	liquid	6	6	6	6		6	3	4	6		6	6	6
-	-	-	-	0	-	dichloro methane	liquid	B	A	A	A	1	B	0	A	A	A	4	1	1
-	+	0	+	+	+	Diesel fuel	liquid	4	2	4	5		6	4	6	6	6	6	4	5
+	+	+	+	+	+	diethanolamine	liquid	6	6	6	6	6	6	2	2	4	2	6	6	6
-	-	-	-	0	-	diethyl amine (DEA, ethyl ethylene amine)	liquid	1	A	A	2	1	1	A	A	1		4	1	2
-	-	-	-	-	-	diethyl ether (ether)	liquid	1	A	1	1		1	A	A	B		2	1	1
+	+	+	+	+	+	diethyl phthalate (DEP or phthalic acid diethyl ester)	liquid	6	6	6	6	6	6	6	6	6		6	6	6
-	-	-	-	+	-	diethyl sulphide	liquid	1	0	0	1	1	1	A	A	B		6	1	1
+	+	+	+	+	+	diethylamine triamine	liquid	6	6	6	6	6	6	6	6	6		6	6	6
+	+	+	+	+	+	diethylene glycol	liquid	6	6	6	6	6	6	6	6	6	6	6	6	6
0	-	-	-	-	+	dimethyl acetamide	liquid	4	3	2	2	2	2	A	A	1	A	2	6	6
-	0	-	0	0	+	dimethyl aminoethyl methacrylate (DMAEMA)	liquid	3	1	2	3		4	1	3	3		4	4	5
0	-	-	-	+	+	dimethyl formamide (DMF)	liquid	3	3	2	2	2	1	A	B	1		5	6	6
+	+	+	+	+	+	dimethyl phthalate	liquid	6	6	6	6	6	6	4	6	6		6	6	6
-	0	-	0	0	+	dimethyl sulphate	liquid	2	1	2	3		3	B	1	2		4	6	6
0	+	+	0	0	+	dimethyl sulphoxide (DMSO)	liquid	6	4	6	6	6	3	1	2	2		4	6	6
-	-	-	-	0	+	dioxane	liquid	3	1	2	2	2	1	0	A	1	B	4	6	6
+	+	+	+	+	+	diphenylamine	solid	6	6	6	6	6	6	6	6	6		6	6	6
-	+	0	+	+	0	dodecylmercaptan	liquid	3	2	3	5	6	6	4	4	6		6	4	4
0	+	0	+	+	+	Dowanol PGDA (propylene glycol-1,2 diacetate)	liquid	5	3	4	6		5	1	2	4		5	6	6
-	+	0	+	+	+	Dowanol PnB (>95 % 3-butoxy-2 propanol)	liquid	4	2	3	6		6	1	3	5		6	6	6
0	+	0	+	+	0	engine oil	liquid	4	3	3	5		6	2	3	5		6	3	4
-	0	0	0	+	+	ethanol	liquid	2	1	3	4	4	4	1	2	3	3	6	6	6
+	+	+	+	+	+	ethanolamine	liquid	6	6	6	6	6	6	1	2	4	2	6	6	6
+	+	+	+	+	+	ethidium bromide 1% aqueous	liquid	6	6	6	6	6	6	6	6	6		6	6	6
-	0	-	+	+	+	ethoxypropanol	liquid	4	2	2	4		5	B	1	4	2	6	6	6
-	-	-	-	-	0	ethyl acetate	liquid	1	B	1	1	2	1	A	A	B	A	1	3	4
-	-	-	-	+	-	ethyl benzene	liquid	1	0	1	1	1	1	0	A	1	A	6	1	1
-	-	-	-	-	0	ETHYL BUTYRATE KOSHER (NK, LANDA)	liquid	1	0	1			1	0	A	1		2	2	3
-	-	-	-	-	0	ethyl formate	liquid	1	A	A	1	1	B	0	A	A		1	4	4
-	-	-	-	-	0	ethyl methacrylate	liquid	1	0	0	1	2	2	A	B	1		2	3	3
-	-	0	-	+	+	ethylamine 70 %	liquid	2	2	3	2		1	0	0	B		6	6	6
-	-	-	-	-	0	ethyleacrylate	liquid	1	B	A	1	1	1	A	A	1	B	1	3	4
+	+	+	+	+	+	ethylene carbonate 30 %	liquid	6	6	6	6	6	6	6	6	6		6	6	6
-	-	-	-	+	0	ethylene chloride (1,2-dichloroethane)	liquid	1	0	1	1	1	1	0	0	B	0	6	3	4
0	0	0	0	+	+	ethylene diamine	liquid	4	3	3	4	0	3	A	B	2		5	6	6
+	+	+	+	+	+	ethylene glycol	liquid	6	6	6	6	6	6	6	6	6	6	6	6	6
-	+	0	+	+	+	ethylene glycol monobutyl ether; butoxy ethanol; butyl glycol	liquid	2	1	3	5		6	1	2	4		6	6	6



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												403	706	723, 725	726		733, 836	742, 757	736-739	759						
-	+	-	+	+	-	Exxsol D 60	liquid	2	1	2	5		6	1	2	4		6	1	2	6	1	2			
+	+	+	+	+	+	ferric chloride	liquid	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6			
+	+	+	+	+	+	ferric chloride solution 10-40 %	liquid	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6			
-	+	+	+	+	+	formaldehyde 37% (stabilised with approx.10% methanol)	liquid	3	B	5	6		6	1	3	5		6	6	6	6	6	6			
+	+	+	+	+	+	formamide	solid	6	6	6	6	6	6	5	6	6		6	6	6	6	6	6			
+	+	+	+	+	+	formic acid, 10 %	liquid	6	6	6	6	6	6	5	6	6		6	6	6	6	6	6			
+	+	+	0	+	+	formic acid, 50 %	liquid	5	5	6	5	6	4	1	2	4		6	6	6	6	6	6			
0	+	-	-	+	+	formic acid, 98 %	liquid	5	3	6	6		1	0	A	1		6	6	6	6	6	6			
-	-	-	0	+	-	four-stroke fuel Normal/Super/Super Plus/lead-free	liquid	1	A	B	2	4	4	A	B	3	2		6	6	1	1	1			
-	0	0	-	+	0	fuming sulphuric acid 65 % SO3 (oleum)	liquid	3	1	3	3		2	0	0	1		5	3	4			4			
0	0	0	-	0	+	gamma BUTYROLACTONE	liquid	4	3	3	3	3	2	0	B	1		4	6	6			6			
+	+	+	+	+	+	glycerine	liquid	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6			
+	+	+	+	+	+	Glystantin	liquid	6	6	6	6	6	6	6	6	6		6	6	6	6	6	6			
0	+	0	+	+	0	heating oil	liquid	4	3	3	6	6	6	4	6	6	6	6	6	3	4		1			
-	+	-	+	+	-	heptane-n	liquid	1	B	1	6	6	6	1	3	4	4		6	1	1		1			
-	+	-	+	+	-	hexane-n	liquid	1	1	1	6	6	6	1	2	5	2		6	2	2		2			
-	+	-	-	-	+	hexenal (trans-2-hexenal)	liquid	1	1	0	5		1	A	A	B		2	4	5			5			
0	+	0	+	+	+	Hydranal composite 5 K	liquid	5	3	4	6		6	2	4	6		6	6	6	6	6	6			
-	-	-	-	+	+	Hydranal solvent	liquid	3	1	2	2	2	2	B	1	1	1		6	6	6	6	6			
-	-	-	-	+	0	Hydranal working medium K	liquid	2	A	1	1	1	B	0	A	A		6	3	4			6			
-	-	-	-	+	+	HYDRANAL® Coulomat AG	liquid	2	1	2	2		2	A	1	1	1		6	6	6		6			
				+	+	hydrazine	liquid						5	2	2	4			6	6			6			
+	+	+	+	+	+	hydrobromic acid 47 %	liquid	6	6	6	6		6	6	6	6		6	6	6	6	6	6			
+	+	+	+	+	+	hydrochinone	solid	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6			
+	+	+	+	+	+	hydrochinone monomethyl ether	solid	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6			
+	+	+	+	+	+	hydrochloric acid 0-10 %	liquid	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6			
+	+	+	+	+	+	hydrochloric acid 10-20 %	liquid	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6			
0	+	+	+	+	+	hydrochloric acid 20-30 %	liquid	6	3	6	6	6	6	3	4	5	3		6	6	6	6	6			
+	+	+	+	+	+	hydrofluoric acid 15 %	liquid	6	6	6	6	6	6	4	5	6		6	6	6	6	6	6			
0	+	+	0	+	+	hydrofluoric acid 40 %	liquid	5	4	6	5		4	B	1	3	1		6	6	6	6	6			
+	+	+	+	+	+	hydrogen peroxide,30 % (Perhydrol)	liquid	6	6	6	6	6	6	6	6	6	6		6	6	6	6	6			
+	+	+	+	+	+	hydroxyl ammonium chloride	solid	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6			
-	+	0	+	+	0	IBS special cleaner EL/ EXTRA isoparaffinic hydrocarbon mixture	liquid	4	1	4	6		6	3	5	6		6	4	4			4			
-	+	-	+	+	0	IBS special cleaner PURGASOL low-aromatic HC mixture	liquid	3	1	2	5		6	4	6	6		6	3	3			3			
+	+	+	+	+	+	Incidin Extra (1.0 % solution in water)	liquid	6	6	6	6	6	6	6	6	6	6		6	6	6	6	6			
+	+	+	+	+	+	INCIDIN PERFECT (0.5 % solution in water)	liquid	6	6	6	6	6	6	6	6	6	6		6	6	6	6	6			
+	+	+	+	+	+	Incidin Plus (0.5 % solution in water)	liquid	6	6	6	6	6	6	6	6	6	6		6	6	6	6	6			
+	+	+	+	+	+	Incidur (1.0 % solution in water)	liquid	6	6	6	6	6	6	6	6	6	6		6	6	6	6	6			
+	+	+	+	+	+	iodine	solid	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6			
-	+	-	+	+	-	iso-octane; 2,2,4-trimethyl pentane; isobutyl trimethyl methane; iso-octane	liquid	2	1	2	5	6	6	3	6	6		6	2	2			2			
-	+	+	+	+	+	isobutyl alcohol (isobutanol)	liquid	3	1	6	6		6	1	1	2		6	6	6	6	6	6			
+	+	+	+	+	+	Isoflex Topas NB 52	paste	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6			
-	0	0	0	+	+	ISOPHORONE	liquid	4	2	4	4	5	4	1	1	3		5	6	6			6			
-	-	-	-	-	0	isopropyl acetate	liquid	1	0	0	0		1	0	A	B	B		1	4	4		4			
-	+	+	+	+	+	isopropyl alcohol (isopropanol)	liquid	1	B	5	6	6	6	1	3	5	5		6	6	6	6	6			
-	+	-	+	+	0	JET A-1	liquid	2	B	2	5		6	5	6	6	6	6	6	2	3		3			
-	+	-	+	+	-	Kontakt 60 (Kontakt Chemie)	aerosol	1	0	1	5	6	6	1	3	5		6	1	2			2			
+	+	+	+	+	+	lactic acid, 90 %	liquid	6	6	6	6		6	6	6	6	6	6	6	6	6	6	6			
-	+	-	+	+	-	lemon oil terpene (terpene hydrocarbons)	liquid	2	1	1	5	6	6	1	2	4		6	2	2			2			
+	+	+	+	+	+	Levoxin 15	liquid	6	6	6	6	6	6	6	6	6	6		6	6	6	6	6			
+	+	+	+	+	+	Loctite 243	liquid	6	6	6	6	6	6	3	5	6	6		6	6	6	6	6			
0	+	+	+	+	+	Loctite 262	liquid	6	3	6	6		6	6	6	6		6	6	6	6	6	6			
						Loctite 315	paste																			
-	-	-	-	0	0	Loctite 3298	liquid	1	B	B	1	2	2	A	B	1		3	3	4			4			
0	+	+	+	+	+	Loctite 511	liquid	6	4	6	6	6	6	2	5	6		6	6	6	6	6	6			
0	+	+	+	+	+	Loctite 601	liquid	5	4	5	5	5	5	1	2	4		6	6	6	6	6	6			
-	+	+	+	+	+	Loctite 620	liquid	3	1	6	6	6	6	4	6	6	6		6	6	6	6	6			
-	-	-	-	-	0	Loctite 7200 (gasket remover / adhesive and sealant remover)	liquid	1	A	A	A		1	A	A	B		2	3	3			3			

Swelling after 8 hours:
 + resistant - non resistant
 0 partially resistant

Level 0 0 min. Level 1 ≥10 min. Level 4 ≥120 min.
 Level A 1-5 min. Level 2 ≥30 min. Level 5 ≥240 min.
 Level B 5-10 min. Level 3 ≥60 min. Level 6 ≥480 min.

CHEMICAL RESISTANCE LIST

RESISTANCE TO DEGRADATION						SUBSTANCE	PERMEATION TIME/LEVEL															
NR	CR	CR NBR	NBR	FKM	IIR		chemical	physical state	natural latex		chloro-prene	nitrile/chloroprene		nitrile			Fluoro-carbon rubber	butyl				
						NR			NR	CR	CR NBR	NBR	NBR	NBR	NBR	NBR	FKM	IIR	IIR			
								395	450, 451	720, 722	717	727	730, 732	740, 741	743	754	764	890	897	898		
								403	706	723, 725			733, 836	742, 757								
									708	726			736-739	759								
-	+	-	+	+	-	Loctite 7386	liquid	1	B	1	6	1	6	1	2	4		6	2	2		
-	-	-	0	0	-	Loctite 7800	liquid	1	0	0	2	3	3	0	A	2		3	1	1		
-	-	-	-	0	0	Lösln 100 (universal thinners)	liquid	2	1	2	2		2	0	0	1		3	2	3		
0	+	+	0	+	+	m-cresol	liquid	3	3	6	5		3	1	2	3		6	6	6		
+	+	+	+	+	+	malic acid anhydride	solid	6	6	6	6	6	6	6	6	6		6	6	6		
+	+	+	+	+	+	malic acid, saturated	liquid	6	6	6	6	6	6	6	6	6		6	6	6		
+	+	+	+	+	+	Marlotherm S	liquid	6	6	6	6	6	6	6	6	6		6	6	6		
+	+	+	+	+	+	MDI (4,4'-methylene diphenyl isocyanate)	liquid	6	6	6	6		6	3	4	6		6	6	6		
-	0	0	0	+	+	methacrylic acid	liquid	3	1	3	3		3	B	2	3		6	6	6		
+	0	+	0	+	+	methane sulphonic acid (MSA)	liquid	6	6	6	3		3	1	2	3		6	6	6		
-	0	-	-	0	+	methanol	liquid	1	A	2	4	4	2	A	B	1	1	4	6	6		
-	-	-	-	-	+	METHYL ACETATE	liquid	1	B	1	1		B	0	0	A		1	4	5		
-	-	-	-	-	+	methyl acrylate	liquid	1	0	0	1		1	0	A	B		1	4	5		
-	-	-	-	-	+	methyl ethyl ketone (ethyl methyl ketone, 2-butanone, MEK)	liquid	1	B	1	1	1	B	0	A	A	A	1	5	5		
-	-	-	-	-	0	METHYL FORMIATE	liquid	1	A	A	1	1	B	0	A	A		1	4	4		
-	-	-	-	-	+	methyl isobutyl ketone (MIBK)	liquid	1	B	1	1		1	A	A	1		2	4	5		
-	-	-	-	-	0	methyl methacrylate	liquid	1	B	1	1		1	B	B	B		2	3	3		
+	+	+	+	+	+	methyl orange (aqueous)	liquid	6	6	6	6	6	6	6	6	6	6	6	6	6	6	
+	+	+	+	+	+	methyl red	solid	6	6	6	6	6	6	6	6	6	6		6	6	6	
-	0	0	0	+	+	methylated spirits	liquid	2	1	3	4		4	1	2	3	3	6	6	6		
+	+	+	+	+	+	methylene blue	liquid	6	6	6	6	6	6	6	6	6	6		6	6	6	
0	+	0	+	+	0	Mobil DTE 25	paste	4	3	3	5	6	6	2	3	5	6	6	3	4		
0	+	0	+	+	0	Mobil Vactra Oil No. 2	paste	4	3	3	5		6	2	3	5		6	3	4		
+	+	+	+	+	+	Mobilcut 311 cooling lubricant (20 % triethanolamin, 15 % butoxy-ethoxy-ethoxy ethanol)	liquid	6	6	6	6	6	6	6	6	6	6		6	6	6	
0	+	0	+	+	0	Mobilgear 629	liquid	4	3	3	5	6	6	1	2	4		6	3	4		
0	+	0	+	+	0	Mobilgear 630	liquid	4	3	3	5	6	6	1	1	2		6	3	4		
0	+	0	+	+	0	Mobilmet 151	liquid	4	3	3	5	6	6	1	1	2		6	3	4		
+	+	+	+	+	+	monoethylene glycol	liquid	6	6	6	6	6	6	6	6	6		6	6	6		
-	-	-	-	0	+	morpholine	liquid	1	0	1	1	2	1	0	0	B		3	6	6		
-	+	-	+	+	-	naphtha benzine (white spirit 100/140)	liquid	2	1	2	5	6	6	1	2	4		6	1	2		
+	+	+	+	+	+	nitric acid, 10 %	liquid	6	6	6	6	6	6	6	6	6		6	6	6		
+	+	+	0	+	+	nitric acid, 50 %	liquid	6	6	5	5		4	1	2	3		6	6	6		
-	-	-	-	0	0	nitric acid, fuming (100 %)	liquid	B	A	A	B		B	A	A	A	A		3	3	3	
-	-	-	-	0	-	Nitro thinners 1A	liquid	1	B	B	B		1	A	A	B		3	2	2		
-	-	-	-	+	+	nitrobenzene	liquid	3	2	2	2		2	A	A	1		6	6	6		
0	+	+	-	+	+	o-CRESOL	liquid	3	3	6	5	6	2	0	1	1		6	6	6		
-	-	-	-	+	0	o-dichloro benzene	liquid	2	1	1	2	3	2	A	B	1		6	2	3		
-	0	0	0	+	+	Omnifit 100M thread lock	liquid	4	2	4	4	5	4	1	1	3		6	6	6		
+	+	+	+	+	+	ortho-phosphoric acid 85 %	liquid	6	6	6	6	6	6	6	6	6	6		6	6	6	
+	+	+	+	+	+	oxalic acid	solid	6	6	6	6	6	6	6	6	6	6	6	6	6	6	
+	+	+	+	+	+	P3-galvaclean 20	liquid	6	6	6	6	6	6	2	3	5		6	6	6		
+	+	+	+	+	+	P3-rinsola	liquid	6	6	6	6	6	6	6	6	6	6		6	6	6	
+	+	+	+	+	+	palmitic acid	solid	6	6	6	6	6	6	6	6	6	6	6	6	6	6	
+	+	+	+	+	+	paraffin, liquid	liquid	6	6	6	6		6	6	6	6	6	6	6	6		
+	+	+	+	+	+	paraformaldehyde	solid	6	6	6	6	6	6	6	6	6	6	6	6	6	6	
-	-	-	-	0	-	Pattex classic high-strength contact adhesive	liquid	1	B	B	2		2	A	B	2	1	3	2	2		
-	-	-	-	-	-	Pattex compact	paste	1	B	1	2		2	A	B	1		2	1	2		
-	+	-	+	+	-	pentane	liquid	1	B	1	5	6	6	1	1	2		6	1	2		
+	+	+	+	+	+	perchloric acid, 70 %	liquid	6	5	5	5		5	1	3	4		6	6	6		
-	+	-	+	+	0	Petroleum A III (Ketrul HT)	liquid	2	B	1	5	6	6	4	6	6		6	3	3		
-	+	-	+	+	-	petroleum ether 40/60 (surgical spirit, ligroin)	liquid	1	B	2	5	6	6	1	2	4	2		6	1	1	
-	+	0	0	+	+	Phenol 40.5 (ATE 8007)	solid	4	2	4	6	6	4	1	2	3		6	6	6		
+	+	+	+	+	+	phenolphthalein	solid	6	6	6	6	6	6	6	6	6		6	6	6		
-	0	0	0	+	+	phenolphthalein solution 1 % in ethanol	liquid	2	1	3	4		4	1	2	3		6	6	6		

Swelling after 8 hours:
 + resistant - non resistant
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Level 0 0 min. Level 1 ≥10 min. Level 4 ≥120 min.
 Level A 1-5 min. Level 2 ≥30 min. Level 5 ≥240 min.
 Level B 5-10 min. Level 3 ≥60 min. Level 6 ≥480 min.



by Honeywell

CHEMICAL RESISTANCE LIST

RESISTANCE TO DEGRADATION						SUBSTANCE	physical state	PERMEATION TIME/LEVEL														
NR	CR	CR NBR	NBR	FKM	IIR			natural latex	chloro-prene	nitrile/chloroprene		nitrile			Fluoro-carbon rubber	butyl						
						NR	NR			CR	CR NBR	NBR	NBR	NBR		NBR	NBR	FKM	IIR	IIR		
						chemical	physical state	395	450, 451	720, 722	717	727	730, 732	740, 741	743	754	764	890	897	898		
								403	706	723, 725			733, 836	742, 757								
									708	726			736-739	759								
+	+	+	+	+	+	phosphoric acid, saturated	liquid	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
+	+	+	+	+	+	phosphoric acid, 10%	liquid	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
-	-	-	-	-	0	phosphoryl chloride (phosphorus oxychloride, phosphorus oxytrichloride)	liquid	2	1	2	2		2	A	1	1			2	4	4	
-	-	-	-	-	0	plastic 70	aerosol	1	B	1	1		1	A	A	B			1	2	3	
+	+	+	+	+	+	potassium hydroxide	solid	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
-	-	-	-	0	+	PROPIONALDEHYDE	liquid	1	0	1	1	1	0	0	0	A	A		3	5	5	
-	0	-	0	+	+	propionic acid	liquid	3	2	2	3	3	3	A	B	2			6	6	6	
-	-	-	-	-	0	propyl acetate (acetic acid propyl ester)	liquid	1	0	1	1		1	0	A	B			1	3	4	
-	+	0	+	+	+	propyl alcohol (1-propanol)	liquid	3	2	4	6	6	6	1	3	5	5		6	6	6	
-	-	-	-	-	0	propylamine	liquid	1	A	B	1		1	A	A	B			3	1	2	
-	-	-	-	-	+	pyridine (heterocyclic compound)	liquid	2	1	1	1	1	1	0	0	B			1	4	5	
+	+	+	+	+	+	quicksilver	liquid	6	6	6	6	6	6	6	6	6	6	6	6	6	6	
-	+	0	+	+	0	Rivolta M.T.X. 100	liquid	2	1	3	5	6	6	3	5	6			6	3	4	
-	+	0	+	+	0	Rivolta M.T.X. 60	liquid	2	1	3	5		6	3	5	6			6	3	4	
-	+	-	+	+	-	Rivolta S.K.D. 170 aerosol	aerosol	2	1	2	5		6	1	2	4			6	1	2	
-	+	0	+	+	0	Rivolta S.L.X. top	liquid	4	1	4	5	6	6	3	3	5			6	3	4	
-	+	-	+	+	0	Rivolta T.R.S. plus	liquid	2	1	2	5	6	6	2	4	6			6	2	3	
-	-	-	-	+	0	Seevenax thinners 73	liquid	1	B	2	2		2	A	1	1			5	4	4	
0	+	0	+	+	0	Shell Retinax G	paste	4	3	3	5	6	6	1	3	5			6	3	4	
0	+	0	+	+	0	Shell Tellus 46	liquid	4	3	3	5	6	6	2	3	5			6	3	4	
-	-	-	-	-	+	Sicomet 50	liquid	1	0	2	2	3	1	0	0	B			1	6	6	
-	-	-	-	-	+	Sicomet 85	liquid	1	0	2	2	3	1	0	0	B			1	6	6	
+	+	+	+	+	+	SIDOLIN	liquid	6	6	6	6	6	6	6	6	6			6	6	6	
-	+	-	+	+	-	SILICON TETRACHLORIDE	liquid	1	B	1	5	6	6	6	6	6			6	1	2	
+	+	+	+	+	+	SILVER NITRATE	solid	6	6	6	6		6	6	6	6	6		6	6	6	
+	+	+	+	+	+	SKYDROL LD TYPE 4	liquid	6	6	6	6	6	6	4	6	6			6	6	6	
+	+	+	+	+	+	sodium hydroxide	solid	6	6	6	6	6	6	6	6	6	6		6	6	6	
+	+	+	+	+	+	sodium hypochlorite (12% active chlorine)	liquid	6	6	6	6	6	6	6	6	6			6	6	6	
+	+	+	+	+	+	sodium thiosulphate	solid	6	6	6	6	6	6	6	6	6	6		6	6	6	
-	+	-	+	+	-	special petrol 100/140 (free of aromatics)	liquid	1	B	1	5		6	3	4	6	6		6	1	1	
+	+	+	+	+	+	stearic acid	solid	6	6	6	6	6	6	6	6	6	6		6	6	6	
-	-	-	-	-	+	styrene (phenyl ethene, phenyl ethylene, vinyl benzene, cinnamol, ethyl benzene)	liquid	1	B	A	1		2	A	A	1			6	1	2	
+	+	+	+	+	+	sulphuric acid 10%	liquid	6	6	6	6		6	6	6	6			6	6	6	
+	+	+	+	+	+	sulphuric acid 50%	liquid	6	6	6	6	6	6	6	6	6	6		6	6	6	
-	0	0	0	+	+	sulphuric acid 96%	liquid	5	2	3	4	3	3	1	2	2	2		6	6	6	
+	+	+	+	+	+	talcum	solid	6	6	6	6	6	6	6	6	6			6	6	6	
-	-	-	-	-	+	Tangit cleaner PVC-U/CABS	liquid	1	B	A	1	B	A	0	A	A	A		B	6	6	
-	-	-	-	-	0	Tangit PVC-U adhesive	liquid	1	A	B	1	1	1	A	A	B	1		2	3	3	
-	0	0	0	+	+	TDI mix (2.6-TDI & 2.4 TDI, 35:65)	liquid	4	2	3	4		3	1	2	2			6	6	6	
-	-	-	-	-	-	Terokal 2444	liquid	1	B	1	1		1	A	A	B			1	1	2	
-	+	-	+	+	0	tertiary butylethylether	liquid	1	1	1	5	6	6	2	2	4			6	2	3	
-	0	-	+	+	-	tetrachloroethylene (perchloroethylene)	liquid	1	B	1	4		5	1	2	4	2		6	1	1	
-	-	-	-	-	-	tetrahydrofuran	liquid	1	A	B	1	2	B	0	A	A	A		1	1	1	
-	-	-	0	0	0	tetramethyl ethylene diamine	liquid	1	B	1	2		4	A	B	3			4	2	3	
+	+	+	+	+	+	TEXANOL	liquid	5	5	6	6	6	6	6	6	6			6	6	6	
+	+	+	+	+	+	thioacetamide	solid	6	6	6	6	6	6	6	6	6			6	6	6	
0	0	+	0	+	+	thioglycol acid	liquid	5	4	5	4		3	B	1	2			6	6	6	
+	+	+	+	+	+	thiourea	solid	6	6	6	6		6	6	6	6	6		6	6	6	
+	+	+	+	+	+	Titriplex III	solid	6	6	6	6	6	6	6	6	6	6		6	6	6	
-	-	-	-	-	-	toluene	liquid	1	A	1	1	2	1	A	A	1	B		6	1	1	
+	+	+	+	+	+	Topanol O	solid	6	6	6	6	6	6	6	6	6	6		6	6	6	
-	-	-	-	-	+	tributyl phosphate	liquid	1	1	1	1	2	1	0	B	B			2	6	6	
-	-	-	-	-	-	trichlore ethylene (tri)	liquid	1	A	B	1	1	1	0	A	B			6	B	1	
+	+	+	-	+	+	trichloro acetic acid	solid	6	6	6	5	6	2	0	0	1			6	6	6	
+	+	+	+	+	+	triethanolamine	liquid	6	6	6	6	6	6	1	2	4	3		6	6	6	
-	+	-	+	+	+	TRIETHYLAMINE	liquid	1	A	1	5		6	1	2	4			6	4	5	
0	+	+	-	+	+	trifluoroacetic acid	liquid	6	4	6	5	5	1	A	A	1			6	6	6	
-	-	-	0	+	-	trifluoro methane sulphonc acid	liquid	0	0	0	0		4	0	0	3			6	0	0	
+	+	+	+	+	+	Triton (R) X-100	liquid	6	6	6	6	6	6	6	6	6			6	6	6	

Swelling after 8 hours:
 + resistant - non resistant
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Level 0 0 min. Level 1 ≥10 min. Level 4 ≥120 min.
 Level A 1-5 min. Level 2 ≥30 min. Level 5 ≥240 min.
 Level B 5-10 min. Level 3 ≥60 min. Level 6 ≥480 min.

CHEMICAL RESISTANCE LIST

RESISTANCE TO DEGRADATION						SUBSTANCE	PERMEATION TIME/LEVEL												
NR	CR	CR NBR	NBR	FKM	IIR		natural latex	chloroprene	nitrile/chloroprene		nitrile					FKM	butyl		
							NR	NR	CR	CR NBR	NBR	NBR	NBR	NBR	NBR	FKM	IIR	IIR	
						chemical	395	450, 451	720, 722	717	727	730, 732	740, 741	743	754	764	890	897	898
						physical state	403	706 708	723, 725 726			733, 836 736-739	742, 757 759						
+	+	+	+	+	+	urea	6	6	6	6	6	6	6	6	6	6	6	6	6
0	+	0	+	+	0	used oil	4	3	3	5	6	6	1	1	2		6	3	4
-	-	-	-	-	+	vinyl acetate monomer	B	A	B	1	1	1	0	0	1		1	4	5
-	+	-	+	+	-	WD-40	2	1	2	5	6	6	1	2	4		6	1	2
-	-	-	-	+	-	xylol	1	B	B	1	3	2	0	A	1	A	6	2	2

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Penetration:

All chemical protective gloves are tested for level 3 = AQL 0,65.
This is a 100%-control.

Degradation resistance:

Level	degradation resistance	analysis
+	< 7%	resistant
0	< 15%	partially resistant
-	≥ 15%	non resistant

Important notice:

The information in the recommendation list was tested under laboratory conditions (new gloves, no additional mechanical exertion, room temperature) with utmost care and with modern measuring methods. This data only serves as an orientation when selecting the appropriate chemical protective glove, as the conditions in real usually vary to the those in the laboratory. They especially do not replace the aptitude test of the glove user.

Articles 738 and 739 are the winter versions of articles 736 and 737. Therefore, 738 and 739 offer identical permeation times and swelling properties.

Due to the material composition there is no degradation of article 761, therefore this glove was not included in the column degradation.

