



JemicladTM



Chemical resistance:

Medium Organic chemicals	Concentration %	Temperature	
		20°C	60°C
Formic acid	10	++	++
Formic acid	100	++	+
Aniline	-	-	-
Ethanol	-	++	+
Benzine-benzene mixture (BV-Aral)	-	-	-
Benzene	-	-	-
Butanol	-	++	++
Cyclohexane	-	++	+
Cyclohexanol	-	++	++
Decalin	-	++	++
Diesel fuel	-	++	-
Diethyl ether	-	-	-
Pure acetic acid	-	++	-
Acetic acid	10	++	++
Formaldehyde	-	++	+
Glycol	-	++	++
Fuel oil	-	++	k.A.
Heptane	-	++	-
Hexane	-	++	++
M-cresol	-	+	-
White spirit	-	++	0
Machine oil	-	++	++
Methanol	-	++	+
Olive oil	-	++	++
Petroleum ether	-	++	+
Turpentine	-	++	0
Toluene oil	-	-	-
Transformer oil	-	++	++
Xylene	-	-	-

Medium Inorganic chemicals	Concentration %	Temperature	
		20°C	60°C
Ammonia	24	++	-
Chromosulphuric acid	-	++	0
Potash lya	10	++	++
Aqua regia	-	++	0
Sodium chlorite	40	++	++
Sodium dithionite	10	++	++
Sodium hypochlorite	40	++	++
Soda lye	10	++	++
Soda lye	40	++	++
Phosphoric acid	10	++	++
Phosphoric acid	95	++	++
Nitric acid	10	++	++
Hydrochloric acid	10	++	++
Hydrochloric acid	35	++	++
Sulphuric acid	10	++	++
Sulphuric acid	96	++	++

++ good resistance Weight difference under 1%

+ resistant Weight difference 1-5%

0 partially resistant Weight difference 5-10%

- non resistant

Other chemicals on request



Technical Data:

Mechanical properties	Standard	Unit	Value
Apparent density	DIN 53479 / ISO 1183	g/cm ³	~1,43
Yield stress (tensile strength)	DIN 53455 / ISO 527	MPa	≥55
Elongation at tear	DIN 53455 / ISO 527	%	≥15
Flexural strength	DIN 53452 / ISO 178	MPa	≥80
Compressive strength	based on ISO 844	MPa	≥70
Modulus of elasticity	DIN 53457 / ISO 527-2/1A/50	MPa	≥3000
Notched impact strength	DIN 53453 / ISO 179	KJ/m ²	≥4
Impact strength	DIN 53453 / ISO 179	KJ/m ²	
	0°C		no failure
	-20°C		-
	-30°C		-
	-40°C		-
Ball indentation hardness (358N/30s)	DIN 52612	W/mK	~100

Thermal properties	Standard	Unit	Value
Vicat softening temperature	DIN 53460 / ISO 306	°C	≥75
Deflection temperature	DIN 53461 / ISO 75	°C	~68
Coefficient of linear thermal expansion from -30°C to +50°C	DIN 53752 (process Ae)	mm/mK	0,08
Thermal conductivity from 0°C to +60°C	DIN 52612	W/mK	0,16

Electrical properties	Standard	Unit	Value
Dielectric constant E _r (at 1 kHz)	VDE 0303 T4	-	3,4
Dielectric loss factor tan (at 1kHz)	VDE 0303 T4	-	0,016
Surface resistance	DIN VDE 03030 T30 DIN IEC 93	Ω	>10 ¹⁵
Volume resistivity	DIN VDE 03030 T30 DIN IEC 93	Ω · m	>10 ¹⁴
Dielectric strength	DIN VDE 03030 T21 1 mm Sheet	KV/mm	≥23
Tracking resistance	DIN IEC 112	Level	CTI 600
Arc resistance	DIN VDE 0303 T5	Index	2.2.2.2

Electrical properties	Standard	Unit	Value
Water absorption after 7 days	DIN 53495	%	<0,08
Fire behaviour: Surface spread of flame	BS 476 Part 7 (1987)	Class 1	
Fire behaviour: fire propagation	BS 476 Part 6 (1989)	Class 0*	
Physiological assessment			generally recognized as safe

(*when fixed to a non-combustible substrate)