

## PHYSICAL PROPERTIES

No.	Characteristics	Value	Method of Testing
1	Specific Gravity / Density (kg/m <sup>3</sup> )	1,42	ASTM D792
2	Water absorption, 24hrs, 23°C (%)	0,035	ASTM D570

## MECHANICAL PROPERTIES

No.	Characteristics	Value	Method of Testing
1	Tensile strength at yield (N/mm <sup>2</sup> )	71	ASTM D638
2	Elongation at yield (%)	3	ASTM D638
3	Tensile strength at break (N/mm <sup>2</sup> )	35	ASTM D638
4	Elongation at break (%)	20	ASTM D638
5	Hardness, Rockwell R Scale	115	ASTM D785
6	Notched impact strength (mj/mm <sup>2</sup> )	8	ASTM D256
7	Flexural strength at yield (N/mm <sup>2</sup> )	103	ASTM D790
8	Modulus of elasticity (N/mm <sup>2</sup> )	3.100	ASTM D638

## THERMAL PROPERTIES

No.	Characteristics	Value	Method of Testing
1	Thermal conductivity at 20°C	0,14	ASTM C177
2	Coefficient of thermal expansion (µm/°C)	0,078	ASTM D696
3	Heat deflection temperature, Load: 1.82 Mpa (°C)	72	ASTM D648
4	Vicat softening temperature, Load: 1 Kg (°C)	86	ASTM D1525

## ELECTRICITY PROPERTIES

No.	Characteristics	Value	Method of Testing
1	Dielectric constant at 50Hz	4	ASTM D150
2	Dielectric constant at 1MHz	3	ASTM D150
3	Dielectric strength at 50V/s (kV/mm)	50	ASTM D149
4	Dissipation loss factor At 1KHz	0,01	ASTM D150
5	Volume resistivity (ohm-cm)	1,2x10 <sup>15</sup>	ASTM D257
6	Surface resistancy (ohm)	1,3x10 <sup>15</sup>	ASTM D257

## OTHER PROPERTIES

No.	Characteristics	Value	Method of Testing
1	Welding Temperature (°C)	220	-
2	Forming Temperature (°C)	130	-
3	Flammability	V0 / SE	UL94 / ASTM D635
4	Limiting Oxygen Index (%)	54	ASTM D2863

## CHEMICAL PRESISTANCE

No.	Jenis Bahan Kimia	Level Konsentrasi	Level Ketahanan		
			Tidak Bagus	Cukup Bagus	Sangat Bagus
1	Acetic acid	5 - 10%	-	-	✓
2	Acetone	-	✓	-	-
3	Aluminium Chloride	10%-Saturated	-	-	✓
4	Aluminium Fluoride	Aqueous	-	-	✓
5	Aluminium Oxide	Solid	-	-	✓
6	Ammonium Hydroxide	5 - 100%	-	-	✓
7	Benzene	-	✓	-	-
8	Butyl Alcohol, normal	Techn. Pure	-	✓	-
9	Calcium Carbonate	Saturated	-	-	✓
10	Calcium Chloride	Aqueous	-	✓	-
11	Calcium Phospate	Aqueous	-	-	✓
12	Calcium Sulfate	Saturated	-	-	✓
13	Carbon Dioxide, dry	Techn. Pure	-	-	✓
14	Carbonic Acid	-	-	-	✓
15	Cetyl Alcohol	100%	-	-	✓
16	Chloric Acid	1 - 20%	-	✓	-
17	Chlorine	10% wet	-	-	✓
18	Copper Carbonate	-	-	-	✓
19	Cotton oil	Techn. Pure	-	-	✓
20	Dextrin	Aqueous	-	-	✓
21	Diesel Fuel	-	-	✓	-
22	Ethyl Acetate	100%	✓	-	-
23	Ethyl Alcohol	50%	-	-	✓
24	Ferric Sulfate	Saturated	-	-	✓
25	Fluorides	-	-	-	✓
26	Formaldehyde Solution	10 - 40%	-	✓	-
27	Fruit Pulp	-	-	-	✓
28	Fruite Wine	-	-	-	✓
29	Gasoline	-	-	✓	-
30	Glucose	each	-	-	✓
31	Hydrogen	Techn. Pure	-	-	✓
32	Isobutanol	-	-	-	✓
33	Jet Fuel JP 3 - 5	-	-	✓	-
34	Kerosene	-	-	✓	-
35	Lactid Acid	25%	-	-	✓
36	Lactose	-	-	-	✓
37	Lauryl Alcohol	100%	-	-	✓
38	Machine Oil	100%	-	-	✓
39	Mercury	pure	-	-	✓
40	Milk	-	-	-	✓
41	Mustard	-	-	-	✓
42	Naphtalene	100%	✓	-	✓
43	Nicotine	-	-	-	✓
44	Nitric Acid	1 - 10%	-	-	✓
45	Olive Oil	-	-	-	✓
46	Palm Oil	-	-	-	✓
47	Phosporic Acid	85%	-	-	✓
48	Sea Water	-	-	-	✓
49	Starch Syrup	-	-	-	✓
50	Tartaric Acid	-	-	-	✓
51	Toluene	100%	✓	-	-
52	Vaseline Oil	100%	-	-	✓
53	Vegetable oils	-	-	-	✓
54	Vinegar	-	-	-	✓
55	Whiskey	-	-	-	✓
56	Zinc Carbonate	Saturated	-	-	✓

## RESISTANCE TO CHEMICALS

Chemical	ACID				ALKALI	
	Sulfuric Acid	Hydrochloric Acid	Nitric Acid	Acetic Acid	SODA (Sodium Carbonate)	
	60%	35%	70%	90%	5%	15%
<b>Result</b>	⊙	⊙	⊙	⊙	▽	✗

Chemical	ORGANIC SOLVEN						
	Formalin	Carbon Tetrachloride	Acetone	Ethyl Acetate	Vinyl	Gasoline	Sodium Hypochlorite
	60%	35%	70%	90%	70%	90%	
<b>Result</b>	⊙	⊙	✗	✗	⊙	⊙	○