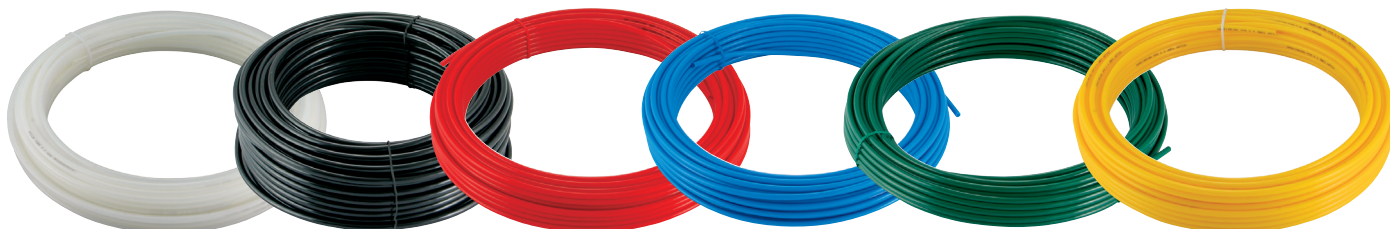


Polyamide 12 Tubes

BS 5409, DIN 73378 and DIN 74324



RoHS 3
COMPLIANT ✓



Raw Material Properties

- Density: 1,02 g/cm³
- Shore/Hardness: 65 D
- Melting point: 173°C
- Water absorption: % 1,4
- Humidity absorption: % 0,7

Physical Properties

- High impact resistance at low temperatures
- UV and heat stability
- High pressure resistance
- Weathering resistance
- Easy to use with fittings
- Hydrolysis resistance
- Excellent diameter sensitivity
- Zinc chloride resistance
- High resistance for fuel, oil and grease oil (see over page)

ID mm	Wall Thickness mm	OD mm	Tolerance mm	Max. Working Pressure			Bending Radius mm	Burst Pressure Bar
				-10°C Bar	+20°C Bar	+80°C Bar		
1.5	0.75	3.0	± 10	42.0	27.0	20.0	15	127
2.0	1.00	4.0	± 10	42.0	27.0	20.0	15	127
2.5	0.75	4.0	± 10	31.0	20.0	15.0	20	93
3.0	1.00	5.0	± 10	31.0	20.0	15.0	30	93
4.0	1.00	6.0	± 10	29.0	18.0	14.0	35	81
6.0	1.00	8.0	± 10	21.0	13.0	10.0	55	63
7.0	1.50	10.0	± 10	24.0	14.0	11.0	50	71
8.0	1.00	10.0	± 10	16.0	10.0	7.5	85	48
9.0	1.50	12.0	± 10	21.0	13.0	10.0	80	63
10.0	1.00	12.0	± 10	12.0	7.0	6.0	120	36
11.0	1.50	14.0	± 10	16.0	10.0	7.5	120	48
13.0	1.50	16.0	± 10	12.0	7.0	6.0	130	36



Chemical Resistance Table

		PA	PE	PVC	PUR			PA	PE	PVC	PUR
		Polyamide	Polyethylene	Polyvinyl chloride soft	Polyurethane			Polyamide	Polyethylene	Polyvinyl chloride soft	Polyurethane
1	Acetic acid	4	2	3	3	100	Lemon juice	1	1	1	1
2	Acetic acid anhydride	1	3	4	4	101	Linseed oil	1	1	3	1
3	Acetone	1	1	5	4	102	Liquors	1	1	2	1
4	Aluminium salts, aq	1	4	1	2	103	Magnesium salts, aq	1	1	1	1
5	Alums, aq	1	1	1	1	104	Margarine	1	3	1	1
6	Aminobenzoic acid	2	1	3	4	105	Mercury	1	1	3	1
7	Ammonia, aq	1	1	1	4	106	Mercury salts, aq	1	1	3	1
8	Ammonia, g	1	1	1	1	107	Methanol	1	1	3	1
9	Ammonium acetate, aq	1	1	1	4	108	Methyl ethyl ketone	1	4	3	4
10	Ammonium carbonate, aq	1	1	1	4	109	Methylene chloride	3	4	4	4
11	Ammonium chloride, aq	1	1	1	1	110	Milk	1	1	1	1
12	Ammonium nitrate, aq	1	1	1	1	111	Mustard	1	1	1	1
13	Ammonium phosphate, aq	1	1	1	1	112	Nail varnish	1	1	4	4
14	Ammonium sulfate, aq	1	1	1	1	113	Nail varnish remover	1	1	4	4
15	Amyl alcohol	1	1	1	2	114	Naphthalin	1	4	2	1
16	Antifreeze	1	1	1	2	115	Nickel salts, aq	1	1	1	1
17	Barium salts	1	1	1	1	116	Nitric acid (up to 25 %)	4	2	1	5
18	Battery acid	3	1	3	1	117	Nitrobenzoic acid	2	4	4	4
19	Beef tallow	3	1	2	1	118	Octane	1	1	4	1
20	Beer	1	1	1	1	119	Oil no. 3 (ASTM D390-59)	1	3	2	1
21	Benzaldehyde	1	1	3	3	120	Oleic acid	2	2	2	1
22	Benzoic acid	1	1	3	4	121	Olive oil	1	1	2	1
23	Benzoic acid, aq	1	1	1	4	122	Oxalic acid, aq	2	1	3	4
24	Bone fat	1	2	3	1	123	Ozone (<0.5 ppm)	1	4	3	1
25	Boric acid	1	1	1	1	124	Palm oil	1	4	3	2
26	Brake fluid	1	3	3	4	125	Paraffin	1	3	1	2
27	Bromine, aq	4	4	4	4	126	Paraffin ether	1	4	3	1
28	Bromine, l	4	4	4	4	127	Paraffin oil	1	3	1	2
29	Butane, g	1	4	1	1	128	Paraffin oil (petroleum jelly)	1	3	2	2
30	Butane, l	1	1	2	1	129	Pectin	1	1	1	1
31	n-Butanol	1	4	3	4	130	Pepper	1	1	1	1
32	n-Butyl alcohol	1	4	4	4	131	Peppermint oil	1	3	2	1
33	Butylacetate (acetic acid butyl ester)	4	4	5	4	132	Perfume	1	1	4	1
34	Butylacetate	1	2	4	4	133	Phenol	4	4	4	4
35	Calcium chloride, aq	1	1	1	1	134	Phosphoric acid	4	4	1	3
36	Calcium nitrate, aq	1	1	1	1	135	Phosphorus pentoxide	3	1	1	2
37	Carbon disulfide	1	4	4	3	136	Pine needle oil	1	2	2	2
38	Carbon tetrachloride	1	4	4	3	137	Potassium carbonate	1	1	1	3
39	Carnation oil	1	4	2	1	138	Potassium chlorate, aq	2	1	1	2
40	Chlorine, g	4	4	4	4	139	Potassium chloride, aq	1	1	1	1
41	Chlorine, l	4	4	4	4	140	Potassium chromate, aq	3	1	1	1
42	Chlorobenzoic acid	3	4	4	3	141	Potassium hydroxide, aq	1	1	2	1
43	Chloroform	3	4	4	4	142	Potassium iodine, aq	1	1	1	2
44	Chlorosulfonic acid	4	4	4	4	143	Potassium nitrate, aq	1	1	1	2
45	Chrome bath	4	1	1	3	144	Potassium permanganate, aq	3	1	1	3
46	Chromic acid	4	2	3	4	145	Potassium sulfate	1	1	1	1
47	Chromosulfuric acid	4	1	2	3	146	Propane, g	1	3	1	2
48	Chromium salts	4	1	1	3	147	Propane, l	1	4	1	2
49	Citric acid	1	1	1	2	148	Pyridine	1	1	4	5
50	Cleaner	1	1	1	1	149	Rum	1	1	2	1
51	Coca-Cola	1	1	1	1	150	Sea water	1	1	1	1
52	Cocoa	1	1	1	1	151	Shampoo	1	1	1	1
53	Coconut oil	1	2	1	1	152	Silicon oil	1	1	4	1
54	Cod-liver	1	1	4	1	153	Silver salts, aq	1	1	1	1
55	Coffee	1	1	1	1	154	Soapy water	1	1	1	2
56	Cooking oil, animal	1	3	2	2	155	Soda	1	1	1	1
57	Cooking oil, vegetable	1	4	2	2	156	Sodium bicarbonate, aq	1	1	1	1
58	Corn oil	1	4	1	2	157	Sodium bisulfite, aq	1	1	1	2
59	Cresol	4	4	4	4	158	Sodium carbonate (borax), aq	1	1	1	1
60	Cresol, aq	3	4	4	4	159	Sodium carbonate, aq	1	1	1	1
61	Cyclohexane	1	1	1	2	160	Sodium chlorate	2	1	1	2
62	Cyclohexanol	1	1	5	4	161	Sodium chloride, aq	1	1	1	1
63	Cyclohexanone	1	4	5	1	162	Sodium hydroxide (caustic soda)	1	4	4	4
64	Decalin	1	1	1	2	163	Sodium hydroxide, aq	1	1	1	2
65	Detergent	1	1	2	1	164	Sodium hypochlorite	3	1	3	4
66	Dibutyl phthalate	1	3	3	3	165	Sodium nitrate, aq	1	1	1	1
67	Diesel fuel	1	2	2	1	166	sodium nitrite, aq	2	1	1	1
68	Dimethylether	1	2	2	2	167	Sodium perborate, aq	1	1	3	2
69	Dimethylformamide	1	1	4	4	168	Sodium phosphate, aq	1	1	1	2
70	1,4-Dioxane	1	1	4	4	169	Sodium silicate	1	1	1	3
71	Engine oil	1	3	3	2	170	Sodium sulfate, aq	1	1	1	1
72	Ethanol	1	1	3	1	171	Sodium sulfide, aq	1	1	1	1
73	Ether	1	4	3	3	172	Sodium sulfite, aq	1	1	1	1
74	Ethyl acetate	1	2	5	4	173	Sodium thiosulfate	1	1	1	2
75	Ethylene chloride	3	4	4	2	174	Sodium thiosulfate (antichlor), aq	1	1	1	2
76	Ethylhexanol	1	4	4	4	175	Soybean oil	1	4	2	2
77	Ferric salts	1	1	1	2	176	Spruce needle oil	1	2	3	2
78	Fizzy drink	1	1	1	1	177	Starch	1	1	1	1
79	Formaldehyde, aq	3	1	3	2	178	Stearic acid	2	4	1	1
80	Formaline	3	1	2	2	179	Sugar, aq	1	1	1	1
81	Formic acid	4	2	4	4	180	Sulfur	1	4	4	1
82	Fruit juice	1	1	1	1	181	Sulfuric acid (concentrated)	4	4	4	4
83	Fuel	1	4	4	2	182	Sulfuric acid (up to 50 %)	4	1	3	2
84	Fuel oil	1	3	4	1	183	Sulfur dioxide, g	1	1	2	3
85	Gin	1	1	2	1	184	Tar (hot tar)	1	3	3	4
86	Glycerine	1	1	1	1	185	Tartaric acid, aq	1	1	1	1
87	Glycol	1	1	1	2	186	Tea	1	1	1	1
88	Heptane	1	1	1	2	187	Tetrahydrofuran	1	3	4	4
89	Hexane	1	1	1	2	188	Tetralin (tetrahydronaphthalene)	1	4	1	2
90	Honey	1	1	1	1	189	Tin dichloride	1	1	1	1
91	Hydrochloric acid (up to 20 %)	4	1	2	2	190	Toluene	1	4	4	4
92	Hydrochloric acid, g	4	1	2	2	191	Trichloroethylene	2	4	4	4
93	Hydrogen peroxide, aq	2	1	3	2	192	Turpentine (oil of)	1	3	3	4
94	Ink	1	1	1	1	193	Urea, aq	1	1	1	1
95	Isocetane	1	4	1	1	194	Vanilla	1	1	1	1
96	Isopropanol	1	1	3	3	195	Vaseline	1	3	2	1
97	Jelly	1	1	1	1	196	White spirit	1	4	3	1
98	Lactic acid	2	2	3	3	197	Wine	1	1	1	1
99	Lanolin	1	3	2	1	198	Xylene	1	4	4	4

1 Resistant
 2 Resistant in general
 3 Fairly resistant
 4 Non-resistant
 5 Liable to dissolve

This table has been compiled on the basis of in-house tests, the recommendations of our raw material suppliers and customer experiences. Difference in user environments will affect the performance characteristics of the product in different ways. The ratings given are therefore approximate only.