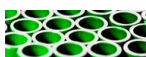


## TECHNICAL DATASHEET

### PVDF HA

<b>Material</b>	Polyvinylidene fluoride copolymer (PVDF)																			
<b>Product code</b>	PD03 / PD05																			
<b>Product type</b>	<ul style="list-style-type: none"> <li>- Hoses</li> <li>- Tubes</li> <li>- Profiles</li> </ul>																			
<b>Application</b>	<ul style="list-style-type: none"> <li>- High pressure hoses and tubes for medical, chemical and industrial environments</li> <li>- Profiles for conveyors in environment where excellent chemical resistance is required</li> </ul>																			
<b>Characteristics</b>	<p>Rigid material suitable for numerous environments demanding good mechanical properties at a wide temperature range. PVDF has exceptional good UV resistance.</p> <table> <tr> <td>Chemical:</td> <td>Excellent resistance to most mineral oils and organic acids, oxidizing environments, hydrocarbons, alcohol and halogenous solutions. Limited/poor resistant to flour, warm sulphuric acid, warm concentrated alkali and solutions like acetone ethyl acetate, in which PVDF will swell <i>Please see separate chemical resistance chart for details</i></td> </tr> <tr> <td>Pressure:</td> <td>Excellent</td> </tr> <tr> <td>UV- &amp; weather:</td> <td>Excellent</td> </tr> <tr> <td>Working temperature:</td> <td>-30°C to +120°C</td> </tr> <tr> <td>Flame resistance:</td> <td>V-0 (UL 94)</td> </tr> <tr> <td>Surface hardness:</td> <td>Shore D 80</td> </tr> <tr> <td>Flexural modulus:</td> <td>2.000 MPa</td> </tr> <tr> <td>Moisture absorption:</td> <td>&lt; 0,03 %</td> </tr> <tr> <td>Remarks:</td> <td>-</td> </tr> </table>		Chemical:	Excellent resistance to most mineral oils and organic acids, oxidizing environments, hydrocarbons, alcohol and halogenous solutions. Limited/poor resistant to flour, warm sulphuric acid, warm concentrated alkali and solutions like acetone ethyl acetate, in which PVDF will swell <i>Please see separate chemical resistance chart for details</i>	Pressure:	Excellent	UV- & weather:	Excellent	Working temperature:	-30°C to +120°C	Flame resistance:	V-0 (UL 94)	Surface hardness:	Shore D 80	Flexural modulus:	2.000 MPa	Moisture absorption:	< 0,03 %	Remarks:	-
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<b>Standard/Norms</b>	<ul style="list-style-type: none"> <li>- Approved for food contact acc. to FDA 21 CFR 177.2510 (USA) and EU directive</li> <li>- Approved for drinking water acc. to NSF 51 (USA)</li> <li>- Approved for medical use acc. to USP XXIV Class VI</li> <li>- Resistance to nuclear radiation</li> </ul>																			
<b>Compliance</b>	<ul style="list-style-type: none"> <li>- EC Regulation 1907/2006 (REACH)</li> <li>- Directive 2011/65/EU (ROHS)</li> <li>- Do not contain dual use additives</li> </ul>																			
<b>Color</b>	Standard:	Natural and black																		
	Specialties:	Special colors at an additional charge																		



## TECHNICAL DATASHEET

<b>Print</b>	Black printing at an additional charge
<b>Packaging</b>	Free coils, coils in carton boxes or plastic bags and on spools <i>Please see separate data sheet for packaging options</i>
<b>Data overview</b>	Specification of tolerances, bending radius and working pressure for standard dimensions
Tolerance:	Produced in accordance with DIN 16982
Bending radius:	90° bending with min. deformation at 20°C
Working pressure:	Theoretical value based on hoop stress data and a safety factor of 2,5 of burst pressure. Working pressure is stated for air only.

Dimension Mm	Tolerance mm		Weight g/m	Bending mm	Working pressure bar				
	OD	ID			20°C	60°C	80°C	95°C	120°C
4,0/2,0	+/-0,1	+/-0,1	-	-	128	72	55	45	25
5,0/3,0	+/-0,1	+/-0,1	-	-	96	54	41	34	19
6,0/4,0	+/-0,1	+/-0,1	-	-	77	43	33	27	15
7,0/5,0	+/-0,1	+/-0,1	-	-	64	36	27	22	13
8,0/5,0	+/-0,1	+/-0,1	-	-	89	50	38	31	18
8,0/5,5	+/-0,1	+/-0,1	-	-	71	40	32	25	14
8,0/6,0	+/-0,1	+/-0,1	-	-	55	31	23	19	11
9,0/7,0	+/-0,1	+/-0,1	-	-	48	27	21	17	10
10,0/6,0	+/-0,1	+/-0,1	-	-	96	54	41	34	19
10,0/7,0	+/-0,1	+/-0,1	-	-	68	38	29	24	13
10,0/8,0	+/-0,1	+/-0,1	-	-	43	24	18	15	8
12,0/8,0	+/-0,1	+/-0,1	-	-	77	43	33	27	15
12,0/9,0	+/-0,1	+/-0,1	-	-	55	31	23	19	11
12,0/10,0	+/-0,1	+/-0,1	-	-	35	20	15	12	7
14,0/12,0	+/-0,1	+/-0,1	-	-	30	17	13	10	6
16,0/12,0	+/-0,15	+/-0,15	-	-	55	31	23	19	11
18,0/16,0	+/-0,15	+/-0,15	-	-	23	13	10	8	4
20,0/16,0	+/-0,15	+/-0,15	-	-	43	24	18	15	8
20,0/18,0	+/-0,15	+/-0,15	-	-	20	11	9	7	4
22,0/18,0	+/-0,15	+/-0,15	-	-	38	22	16	13	8
24,0/20,0	+/-0,15	+/-0,15	-	-	35	20	15	12	7
26,0/22,0	+/-0,15	+/-0,15	-	-	32	18	14	11	6

**Origin** Products are “Made in Denmark” and raw material for the products originates from the EU

**Documentation** Specific documentation is available for:

- chemical resistance
- permeability
- antistatic classification
- standard tolerances
- packaging
- regulatory status

*The information contained in this document is based on information obtain from raw material suppliers, data selected from the literature and specific testing, but shall in no event be held to constitute or imply any warranty, undertaking, express or implied commitment from our part. Our formal specifications define the limit of our commitment. No liability whatsoever can be accepted by Knudsen Extrusion ApS regarding the handling or use of the product or products concerned which must in all cases be employed in accordance with all relevant laws and/or regulations in force in the country or countries concerned.*

