

AGRU PVDF SUPPLY RANGE



- High quality PVDF raw materials
- Large variety of products
- Full traceability via unique product code
- Stock items, ready for shipment

Sheets natural

Dimensions: 2000 x 1000 mm Thickness: 2 – 25 mm

Dimensions: 3000 x 1500 mm Thickness: 3 – 10 mm

Sheets fabric backed

Sheets: 3000 x 1500 mm Rolled: 25000 x 1500 mm

Thickness: 2 – 5 mm

Extruded Blocks

Dimensions: 1000 x 610 mm Thickness: 10 – 100 mm

Sheets Pressed

Dimensions: 2000 x 1000 mm Thickness: 10 – 60 mm

Round bars

Diameter: 10 – 340 mm Length: 1000 mm

Welding Rod

Diameter: 3 – 4 mm

Comprehensive delivery program

In order to provide our customers with an even more reliable supply of PVDF semi-finished products, AGRU expanded the PVDF product portfolio. Now it includes two new Homopolymer PVDF grades to provide an alternative to our standard products.

These grades have the typical AGRU PVDF properties and can be used for a wide range of applications, combined with increased availability, and cost competitive options. Currently there is no experiance with the new grades in HP applications. Therefore we would recommend to use our standard Solef material for HP-Applications.

We have an extensive stock of semi-finished products in both standard and alternative qualities, allowing us to deliver our products quickly.

This summary is intended to give you an overview of our available products and their properties. It should also help you to select the best product for your application.

With this new material development, we are confident to offer our customers high quality PVDF semi-finished products. For more information on these products, please feel free to contact Mr. Haager or Mr. Derfler:





The following table provides an overview of the products made from different PVDF raw materials

AGRU PVDF STANDARD	AGRU PVDF	AGRU PVDF
CODE 30	CODE 37	CODE 3i
The proven AGRU PVDF Solef quality suitable for both chemical and HP applications. From this quality we can offer all our standard products.	Code 37 is a cost efficient alternative to our standard resin, used to produce natural and fabric backed sheets in various dimensions.	A proven PVDF type which can be used for the production of thick-walled semifinished products. It is used for the block extrusion and production of PVDF round rods.

TECHN	TECHNICAL DATA FOR PVDF MATERIAL					
	PROPERTY	STANDARD	UNIT	CODE 30	CODE 37	CODE 3i
	Density at 23 °C	ISO 1183	g/cm³	1.78	1.78	1.78
	MFR 230 °C / 5.0 kg	ISO 1183	g/10min	1.5 - 7	1 - 7	1.5 - 7
	UV Stable (sunlight)			Yes	Yes	Yes
General Properties	Food contact	EU 10/2011	Product tested	Yes	Yes	Yes
General	FOOd CONTACT	FDA 177.25.10	Raw material	Yes	Yes	Yes
Pro G	Clean room grade		-	Yes	No	No
	FM-Approval	FM 4910	Raw material	Yes	No	Yes
		FIVI 4910	AGRU products	Sheets	No	No
	Colour			natural	natural	natural
_	Tensile stress at yield	ISO 527	MPa	50	50	50
Mechanical Properties	Elongation at yield	ISO 527	%	8	8	8
har	Elongation at break	ISO 527	%	20	20	20
Med Pro	Modulus of elasticity	ISO 527	MPa	2000	1700	2000
	Shore hardness; scale D (3 sec)	ISO 868		78	75	76
_ s	Vicat-Softening point VST/B/50	ISO 306	°C	140	138	145
rma ertie	Melting Temperature	DSC	°C	172	170	169
Thermal Properties	Flammability	UL94 EN		V-0	V-0	V-0
	Oxygen Index	ASTM D2863	%	44	44	44
_ s	Specific surface resistance	ASTM D257	OHM	>1014	>1014	>1014
Electrical Properties	Dielectric constant (23 °C; 1 kHz)	ASTM D150	-	7 - 10	4 - 10	4.5 - 9.5
	Dielectric strength (23 °C)	DIN IEC 60243	kV/mm	25	20	23

All values are results of tests, made by raw material suppliers, AGRU and from literature. Most of the figures given in the table are results of tests made on extruded or injection moulded sheets. Lining laminates can only be tested, if the fabric backing is removed carefully by machining. Otherwise, the fabric backing influences the results. These values are average values and can vary depending on product, production method and specimen preparation.

product, production method and specimen preparation.

This table is a valuable help in the choice of a material. The data listed here fall within a normal range of product properties of dry material.

However they are not guaranteed and they should not be used to establish material specification limits nor used alone as the basis of design.

AGRU PVDF Product Portfolio

PRODUCT	SHEET EXTRUDED	SHEET EXTRUDED	FABRIC BACKED	FABRIC BACKED
Dimension	2 x 1 m	3 x 1.5 m	3 x 1.5 m	25 x 1.5 m
Fabric	-	-	Polyester	Polyester
PVDF Code "30"	2 – 20 mm	-	3, 4 mm	3, 4 mm*
PVDF Code "37"	3 – 25 mm	3 – 10 mm	2, 3, 4, 5 mm	2, 3, 4 mm

^{*}For 4 mm thick sheets, the rolls are only 20 m long

PRODUCT	ROUND BARS	BLOCKS	PRESSED SHEETS
Dimension	1 m	1 x 0.61 m	2 x 1 m
PVDF Code "30"	10 – 340 mm	10, 16, 40 – 100 mm	10 – 60 mm
PVDF Code "3i"	20 – 160 mm	40 – 100 mm	_





Product Range AGRU PVDF Standard → Code 30

The proven PVDF Solef quality that is suitable for both chemical and HP applications. From this quality we can offer all our standard products.

NATURAL SHEET PROGRAM

Sheet 2000 x 1000 mm Extruded Protective foil on both sides

AGRU PVDF



Pressed
V CDIT D



AGRU PVDF

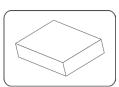
Sheet Pressed

2000 x 1000 mm

PRODUCT CODE	SHEET	THICKNESS [MM]
30.600.2010.02	2	-0.00 / +0.14
30.600.2010.03	3	-0.00 / +0.17
30.600.2010.04	4	-0.00 / +0.20
30.600.2010.05	5	-0.00 / +0.23
30.600.2010.06	6	-0.00 / +0.26
30.600.2010.08	8	-0.00 / +0.32
30.600.2010.10	10	-0.00 / +0.38
30.600.2010.12	12	-0.00 / +0.44
30.600.2010.15	15	-0.00 / +0.53
30.600.2010.20	20	-0.00 / +0.68

PRODUCT CODE	SHEET	I LICKINE 22 [INIINI]
30.600.2010.02	2	-0.00 / +0.14
30.600.2010.03	3	-0.00 / +0.17
30.600.2010.04	4	-0.00 / +0.20
30.600.2010.05	5	-0.00 / +0.23
30.600.2010.06	6	-0.00 / +0.26
30.600.2010.08	8	-0.00 / +0.32
30.600.2010.10	10	-0.00 / +0.38
30.600.2010.12	12	-0.00 / +0.44
30.600.2010.15	15	-0.00 / +0.53
30.600.2010.20	20	-0.00 / +0.68

Block 1000 mm x 610 mm Extruded



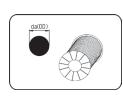
AGRU PVDF

PRODUCT CODE	SHEET	THICKNESS [MM]
30.645.1061.10	10	+0.20 / +1.10
30.645.1061.10	16	+0.30 / +1.50
30.645.1061.10	40	+0.50 / +2.50
30.645.1061.10	50	+0.50 / +2.50
30.645.1061.10	60	+0.50 / +3.50
30.645.1061.10	80	+0.50 / +5.00
30.645.1061.10	100	+0.50 / +5.00

PRODUCT CODE	SHEET	THICKNESS [MM]
30.640.2010.10	10	-0.00 / +0.38
30.640.2010.12	12	-0.00 / +0.44
30.640.2010.15	15	-0.00 / +0.53
30.640.2010.20	20	-0.00 / +0.68
30.640.2010.25	25	-0.00 / +0.83
30.640.2010.30	30	-0.00 / +0.98
30.640.2010.40	40	-0.00 / +1.28

up to 60 mm thickness available on request.

Welding-rod 2 kg roll Circular profile Extruded



AGRU PVDF

PRODUCT CODE	DIAMETER [MM]	MIN. LENGTH [M]
30.410.0000.30	3 ±0.30	133
30.410.0000.40	4 ±0.30	77

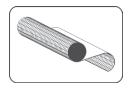






FABRIC BACKED SHEET PROGRAM

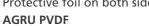
Sheet fabric backed-rolled Polyester fabric 25000 x 1500 mm Extruded Protective foil on both sides AGRU PVDF

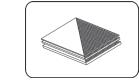


PRODUCT CODE	FIBRE-FREE	THICKNESS [MM]
30.615.1500.03	3	±0.30
30.615.1500.04	4	±0.40

Sheet fabric backed

Polyester fabric 3000 x 1500 mm Extruded Protective foil on both sides

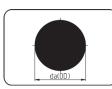




PRODUCT CODE	FIBRE-FREE	THICKNESS [MM]
30.610.3015.03	3	±0.30
30.610.3015.04	4	±0.40

ROUND BAR PROGRAM

Round bar 1000 mm Extruded Protective Hose AGRU PVDF



PRODUCT CODE		DIAMETER [MM]
30.800.0010.10	10	+0.20 / +0.70
30.800.0015.10	15	+0.20 / +0.70
30.800.0020.10	20	+0.30 / +0.70
30.800.0025.10	25	+0.30 / +0.70
30.800.0030.10	30	+0.50 / +0.90
30.800.0035.10	35	+0.50 / +1.10
30.800.0040.10	40	+0.50 / +1.10
30.800.0045.10	45	+0.50 / +1.30
30.800.0050.10	50	+0.50 / +1.30
30.800.0060.10	60	+0.50 / +1.60
30.800.0065.10	65	+0.50 / +1.60
30.800.0070.10	70	+0.50 / +1.60
30.800.0075.10	75	+0.50 / +1.90
30.800.0080.10	80	+0.50 / +2.00
30.800.0090.10	90	+0.50 / +2.20
30.800.0100.10	100	+0.60 / +2.60
30.800.0110.10	110	+0.70 / +2.80
30.800.0125.10	125	+0.80 / +3.00
30.800.0140.10	140	+0.90 / +3.50
30.800.0160.10	160	+1.10 / +4.50
30.800.0180.10	180	+1.20 / +5.00
30.800.0200.10	200	+1.30 / +5.50
30.800.0250.10	250	+1.50 / +6.20
30.800.0300.10	300	+1.50 / +7.00
30.800.0325.10	325	+1.50 / +7.00
30.800.0340.10	340	+ 1.50 / +8.50





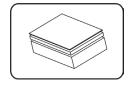
Product Range AGRU PVDF → Code 37

Code 37 is a cost efficient alternative to our standard resin, used to produce natural and fabric backed sheets in various dimensions.

NATURAL SHEET PROGRAM

Sheet

2000 x 1000 mm Extruded Protective foil on both sides **PVDF Code 37**



PRODUCT CODE	SHEET	THICKNESS [MM]
37.600.2010.03	3	±0.17
37.600.2010.04	4	±0.20
37.600.2010.05	5	±0.23
37.600.2010.06	6	±0.26
37.600.2010.08	8	±0.32
37.600.2010.10	10	±0.38
37.600.2010.12	12	±0.44
37.600.2010.15	15	±0.53
37.600.2010.20	20	±0.68
37.600.2010.25	25	±0.83

Sheet

3000 x 1500 mm Extruded Protective foil on both sides **PVDF Code 37**



PRODUCT CODE	SHEET	THICKNESS [MM]
37.600.3015.03	3	±0.17
37.600.3015.04	4	±0.20
37.600.3015.05	5	±0.23
37.600.3015.06	6	±0.26
37.600.3015.08	8	±0.32
37.600.3015.10	10	±0.38

FABRIC BACKED SHEET PROGRAM

Sheet fabric backed

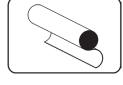
Polyester fabric 3000 x 1500 mm Extruded Protective foil on both sides PVDF Code 37



PRODUCT CODE	FIBRE-FREE	THICKNESS [MM]
37.610.3015.02	2	±0.20
37.610.3015.03	3	±0.30
37.610.3015.04	4	±0.40
37.610.3015.05	5	±0.50

Sheet fabric backed-rolled

Polyester fabric 25000 x 1500 mm Extruded Protective foil on both sides

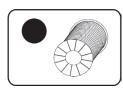


PRODUCT CODE	FIBRE-FREE	THICKNESS [MM]
37.615.1500.02	2	±0.20
37.615.1500.03	3	±0.30
37.615.1500.04	4	±0.40

Welding-rod 2 kg roll Circular profile

Extruded
PVDF Code 37

PVDF Code 37



PRODUCT CODE	DIAMETER [MM]	MIN. LENGTH [M]
37.410.0000.30	3 ±0.30	133
37.410.0000.40	4 ±0.30	77



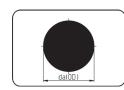


Product Range AGRU PVDF → Code 3i

A proven PVDF type which can be used for the production of thick-walled semifinished products, needed for the block extrusion ore round rods. USP Class VI certification makes this type highly suitable for pharmaceutical applications.

ROUND BAR PROGRAM

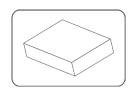
Round bar 1000 mm Extruded Protective Hose PVDF Code 3i



PRODUCT CODE	SHEET	THICKNESS [MM]
3i.800.0020.10	20	+0.30 / +0.70
3i.800.0025.10	25	+0.30 / +0.70
3i.800.0030.10	30	+0.50 / +0.90
3i.800.0035.10	35	+0.50 / +1.10
3i.800.0040.10	40	+0.50 / +1.10
3i.800.0045.10	45	+0.50 / +1.30
3i.800.0050.10	50	+0.50 / +1.30
3i.800.0060.10	60	+0.50 / +1.60
3i.800.0065.10	65	+0.50 / +1.60
3i.800.0070.10	70	+0.50 / +1.60
3i.800.0075.10	75	+0.50 / +1.90
3i.800.0080.10	80	+0.50 / +1.10
3i.800.0090.10	90	+0.50 / +2.00
3i.800.0100.10	100	+0.60 / +2.60
3i.800.0110.10	110	+0.70 / +2.80
3i.800.0125.10	125	+0.80 / +3.00
3i.800.0140.10	140	+0.90 / +3.50
3i.800.0160.10	160	+1.10 / +4.50

NATURAL SHEET PROGRAM

Block 1000 mm x 610 mm Extruded



PVDF Code 3i

PRODUCT CODE	FIBRE-FREE	THICKNESS [MM]
3i.645.1061.40	40	+0.50 / +2.50
3i.645.1061.50	50	+0.50 / +2.50
3i.645.1061.60	60	+0.50 / +3.50
3i.645.1061.80	80	+0.50 / +5.00
3i.645.1061.00	100	+0.50 / +5.00

