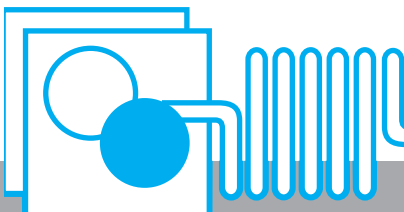




# TROVIDUR

Grey Rigid PVC



*TROVIDUR EN is the name for extruded sheets made from rigid PVC which contains no plasticizers or fillers. It conforms to the technical supply conditions of DIN 16927 for PVC-U. TROVIDUR EN conforms to the requirements of ASTM-D 1784, class 12464-B.*

## Characteristic properties of TROVIDUR EN are:

### ■ High rigidity and strength in comparison with other thermoplastics

TROVIDUR EN fulfils the tensile creep strength requirements in a similar way to PVC-U pipes in conformity with DIN 8061. The creep moduli are higher than those specified in DVS 2205 Part 1.

### ■ Very good electrical insulation properties

TROVIDUR EN fulfils the requirements for insulating protective sheets in conformity with VDE 0681 Part 8 for systems in conformity with VDE 0101.

### ■ High resistance to acids, lyes and salt solutions

TROVIDUR EN's high resistance to chemical attack is comparable with that of DIN 8061.

TROVIDUR EN is certified for use as an inner for composites for use with large number of water polluting liquids in accordance with the Water Resources Policy Act

(Wasserhaushaltsgesetz) of the Deutsche Institut für Bautechnik (DIBt).

### ■ Self-extinguishing when flame is withdrawn

TROVIDUR EN has passed almost all German fire tests for the construction sector. The test certificates are listed in the table of material properties.

### ■ Easily processable

TROVIDUR EN can be welded by means of conventional welding methods. It fulfils the requirements of DVS 2203, Part 1.

TROVIDUR EN can be bonded with solvent cements, two-pack adhesives and contact adhesives in accordance with the specifications of DVS 2204.

TROVIDUR EN can be formed by the known forming methods in accordance with the specifications of VDI 2008/1 and 2 by bending, drawing or stretching.

## Industrial exhaust air technology

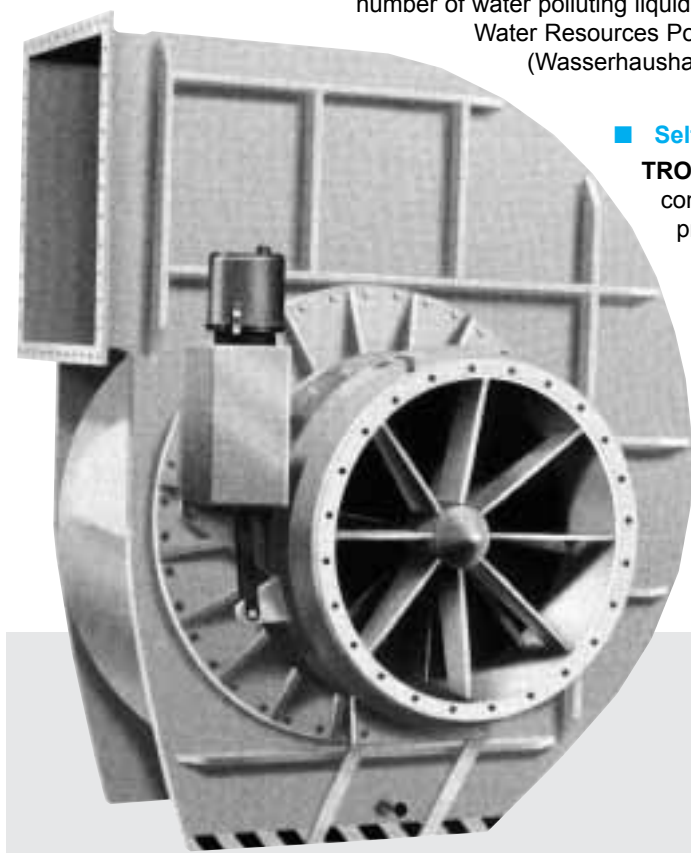
Ducts, gas scrubbers, ventilators, filters  
Requirements:

- Dimensional stability
- Flame resistance

## Thermoplastic containers, apparatus, exposure to chlorine

Containers, tanks, special constructions  
Requirements:

- Materials properties and weld strength in conformity with DVS 2205 Part 1
- High chemical resistance



# MATERIAL PROPERTIES

	PROPERTY AT 23°C	UNIT	TEST METHOD	TROVIDUR EN EC	TROVIDUR ET (glass-clear)
				(PVC-U) PVC-NI	(PVC-U) PVC-NI
1	Density	g/cm <sup>3</sup>	DIN 53479/ISO 1183	= 1,45	= 1,38
2	Yield stress	N/mm <sup>2</sup>	DIN 53455/ISO 527 Testing speed: 50 mm/min Test piece: 3	= 55	≥ 70
3	Elongation at break	%		= 20	≥ 10
4	Impact strength	kJ/m <sup>2</sup>	DIN 53453/ISO 179 Small standard test piece	no break at 0°C	no break at 23°C
5	Notched impact strength (Charpy)	kJ/m <sup>2</sup>	DIN 53453/ISO 179 Small standard test piece	≥ 4 to 23°C	≥ 2 to 23°C
6	Ball indentation hardness H 358/30	N/mm <sup>2</sup>	DIN 53456/ISO 2039 Applied load 358 N	= 120	= 130
7	Modulus of elasticity	N/mm <sup>2</sup>	DIN 53457 Tensile test	≥ 3100	≥ 3200
8	Flexural creep modules for PVC = 5 N/mm <sup>2</sup>	N/mm <sup>2</sup>	Stress duration 1 year	20°C	1800
				40°C	1400
				60°C	600
				80°C	–
9	Creep strength measured on pipes	N/mm <sup>2</sup>	Stress duration 10 years	20°C	28
				40°C	15
				60°C	6,8
				80°C	–
10	Vicat softening point	°C	DIN 53460, method B 50 ISO 306	≥ 80	≥ 67
11	Heat distortion temperature	°C	DIN 53461 } ISO R 75 }	Method A	≈ 75
				Method B	≈ 82
12	Coefficient of linear expansion	K <sup>-1</sup>	Measured between 20 and 60°C	≈ 70 · 10 <sup>-6</sup>	≈ 70 · 10 <sup>-6</sup>
13	Volume resistivity	Ω · cm	DIN 53482	> 10 <sup>15</sup>	> 10 <sup>15</sup>
14	Surface resistance	Ω	DIN 53482	> 10 <sup>13</sup>	> 10 <sup>13</sup>
15	Hot gas welding with round nozzle	°C	Temperature measurement in conformity with DVS 2208/2; Quantity of air approx. 50 l/min	340 ± 10	340 ± 10
	with high speed nozzle	°C		365 ± 10	365 ± 10
16	Heated tool welding	°C	Temperature ± 10°C Preheating pressure Joining pressure	210 to 230	210 to 230
		N/cm <sup>2</sup>		5	5
		N/cm <sup>2</sup>		60	40
17	Thermoforming temperature	°C	–	120 to 150	120 to 150
	Hot-gas heating Infrared radiation heating	°C	–	170 to 180	170 to 180
18	Bonding with solvent cements		DVS 2204 Page 1	suitable	suitable
19	Non-toxicity	–	BGA recommendations	does not correspond	does not correspond
20	Fire behaviour	Construction material class Check symbol	DIN 4102, part 1 B 1 = flame resistant B 2 = normally flammable	B 1 PA-111 2.548	B 1 PA-111 2.1591
21	Weathering resistance		Guiding values	good	satisfactory
22	Working temperature range	°C	Guiding values	-15 to 60	-10 to 55

# DELIVERY PROGRAMME

## ROD STOCK

6, 8, 10, 12, 16, 20, 25, 30, 35, 40, 45, 50, 60, 70, 80, 90, 100, 110, 120, 130, 140, 150, 180, 200, 225, 250mm Diam.

Available on request 280, 300, 350, 400, 500.

Standard 2 metre lgths

Colour RAL 7011 Dark grey

## SHEET STOCK

Standard Sheet Size 2440mm x 1220mm

Standard Sheet Thickness 3, 4.5, 6, 10, 12, 15, 20, 25mm

Colour RAL 7001 FM Light Grey

Standard Sheet Size 2000mm x 1000mm

Standard Sheet Thickness 30, 40, 50mm

Colour RAL 7011 Dark Grey

## WELDING ROD

3mm, 4mm Single Round – 5.7mm Tripple Core

Standard (approx) 3kg Coils

## TROVIDUR PVC Sheet Materials

are also available in:

Trovidur EC White UV Stabilized

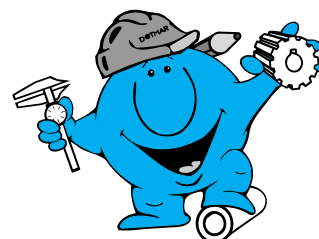
Trovidur ET Clear UV Stabilized

# DOTMAR

ENGINEERING PLASTIC PRODUCTS

ABN 82 714 271 936

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