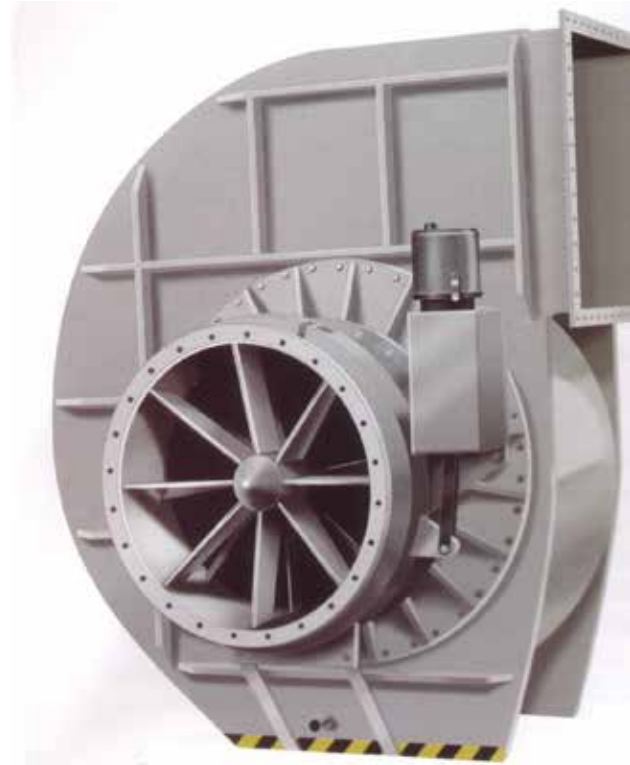


POLYVINYLIDENE  
CHLORIDE -  
**TROVIDUR® PVC-U**



PVC is a highly amorphous material with chemical resistance in areas where HDPE and PP fall short. Trovidur® is the brand name for Rochling Engineering Plastics range of PVC products for various applications.

Trovidur® PVC's are especially outstanding for their high form stability, excellent chemical resistance, thermoformability and excellent flame retardant properties. Trovidur® EN is a PVC-U with high chemical resistance and normal impact strength.

**PROPERTIES:**

- High rigidity, strength and toughness in comparison with other thermoplastics.
- Very high acid resistance (resists many acids, alkalis and solvents).
- Moderate impact resistance and high service temperature (-15 °C – 60 °C).
- Very good moisture resistance.
- Good dimensional stability.
- Bondable – solvent based adhesives.
- Thermoformable and machinable.
- Very good UV resistance.
- Conforms to the technical supply conditions of DIN 16927 for PVC-U.
- TROVIDUR EN PVC also conforms to the requirements of ASTM-D 1784 class 12464-B.
- Suitable for use in applications where Sodium Hypochlorite is present.
- Excellent electrical insulation properties.

**APPLICATIONS:**

Chemical engineering and tank building, Mechanical engineering and plant construction, laboratory benches, fume hoods and equipment.

**DELIVERY PROGRAMME**

Trovidur PVC is available in grey, clear, black and customised colours.

**Ex Stock from Maizey branches:**

Rods | Sheets | Finished components | Pipes & Fittings



Stock Shapes and Finished Components  
NATIONAL DISTRIBUTION - 086 110 0420

Maizey Engineering Finished Components Only  
Tel: (011) 824-2751 | Fax: (011) 824-1829  
Email: [epp@maizey.co.za](mailto:epp@maizey.co.za) | Web: [www.maizeyep.co.za](http://www.maizeyep.co.za)



TROVIDUR® PVC-U				
PROPERTIES	TEST METHOD	UNIT OF MEASURE	EN GREY	ET CLEAR
<b>GENERAL</b>				
DENISTY	DIN EN ISO 1183-1	g/cm³	1,47	1,39
WATER ABSORPTION	DIN EN ISO 62	%	≤3.00	≤3.00
FLAMABILITY 3mm	DIN 4102	3mm	B1 ,1...4mm	B1 ,1...4mm
FLAMABILITY 6mm	UL 94	6mm	V0 ,5V	V0
<b>MECHANICAL</b>				
TENSILE STRENGTH	DIN EN ISO 527-1	MPA	55	70
ELONGATION AT BREAK	DIN EN ISO 527-1	%	20	10
E MODULUS	DIN EN ISO 527-1	MPA	3 100	3 200
NOTCHED IMPACT STRENGTH	DIN EN ISO 179-2	kJ/m²	4	2
BALL INDENTATION HARDNESS	NOT APPLICABLE	MPA	N/A	N/A
SHORE HARDNESS	DIN EN ISO 868/15sek	SCALED	85	83
<b>THERMAL</b>				
MELTING TEMPERATURE	NOT APPLICABLE	°C	N/A	N/A
THERMAL CONDUCTIVITY	DIN 52612-1	W/(m.K)	0,16	N/A
SPECIFIC THERMAL CAPACITY	NOT APPLICABLE	kJ/(kg.K)	N/A	N/A
COEFFICIENT OF LINEAR THERMAL EXPANSION	DIN 53752	10 <sup>-6</sup> K <sup>-1</sup>	60...80	60...80
LONG TERM SERVICE TEMPERATURE	GUIDELINE ONLY	°C	-15...60	-10...55
SHORT TERM SERVICE TEMPERATURE	GUIDELINE ONLY	°C	N/A	N/A
HEAT DEFLECTION TEMPERATURE	DIN EN ISO 306 VICAT B	°C	82	62
<b>ELECTRICAL</b>				
DIELECTRIC CONSTANT	IEC 60250	N/A	3,2	3.2
DIELECTRIC DISSIPATION FACTOR	IEC 60250	N/A	0,02	0,02
SPECIFIC VOLUME RESISTIVITY	IEC 60093	Ω.cm	>10 <sup>15</sup>	>10 <sup>15</sup>
SURFACE RESISTIVITY	IEC 60093	Ω	>10 <sup>13</sup>	>10 <sup>13</sup>
DIELECTRIC STRENGTH	IEC 60243	kV/mm	12	N/A

**When machining thermoplastic stock shapes, remember...**

- Thermal expansion is up to 10 times greater with plastics than metals.
- Plastics lose heat more slowly than metals, so avoid localized overheating.
- Softening (and melting) temperatures of plastics are much lower than metals and plastics are much more elastic than metals.

**Getting started**

- Positive tool geometries with ground peripheries are recommended.
- HSS/Tip tooling with polished top surfaces is suggested for optimum tool life and surface finish.
- Use adequate chip clearance to prevent clogging.
- Adequately support the material to restrict deflection away from the cutting tool.

**Coolants**

Coolants are generally not required for most machining operations, but are strongly suggested during drilling operations, especially with notch sensitive materials such as Nylon, PET-P, PAI, PBI and glass or carbon reinforced products.

In addition to minimizing localized part heat-up, coolants prolong tool life. For optimum surface finishes and close tolerances, non-aromatic, water soluble coolants are suggested. General purpose petroleum based cutting fluids, although suitable for many metals and plastics, may contribute to stress cracking of amorphous plastics such as Polycarbonate.

Because of these differences, you may wish to experiment with fixtures, tool materials, angles, speeds and feed rates to obtain optimum results.

**GENERAL NOTE:**

The data shown fall within the normal parameters of product properties. They should only be used as a guide to initial material selection for the relevant application and for material specification limits. Further technical information is available for specific application requirements. When no value is listed, insufficient details were available to present a usable value.

