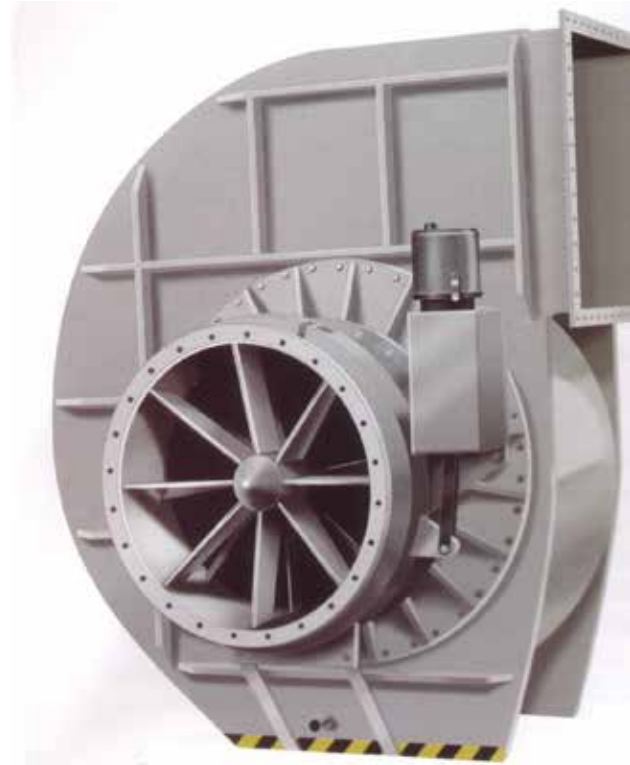
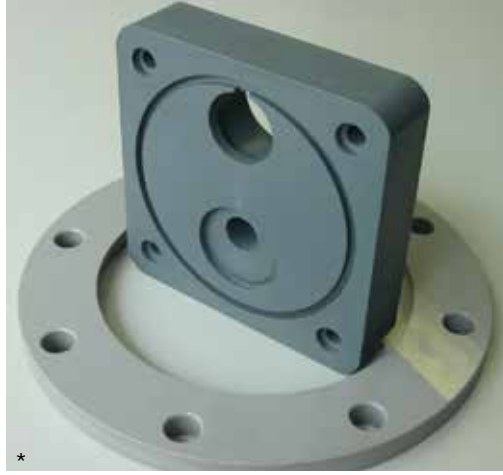


POLYVINYL CHLORIDE - MAIZEY PVC-U



Maizey PVC's are especially outstanding for their high form stability, excellent chemical resistance, thermoformability and flame retardant properties.

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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. and 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



NATIONAL DISTRIBUTION - STOCK SHAPES 086 1100 420

SPECIALIST ENGINEERING PLASTICS BRANCH

Tel: +27(11) 568-4000 | Fax: +27 (11) 568-4970

Email: eppsales@maizey.co.za

MACHINED COMPONENTS AND INDUSTRIAL FABRICATION

Tel: +27(11) 824-2751 | Fax: +27 (11) 824-1829

Email: epp@maizey.co.za

www.maizeyep.co.za

| Maizey PVC-U | | | | |
|-----------------------------------------|---------------------------|----------------------------------|-------------------|-------------------|
| PROPERTIES | TEST METHOD | UNIT OF MEASURE | EN GREY | ET CLEAR |
| GENERAL | | | | |
| DENISTY | DIN EN ISO 1183-1 | g/cm ³ | 1,47 | 1,39 |
| WATER ABSORPTION | DIN EN ISO 62 | % | ≤3.00 | ≤2.00 |
| FLAMABILITY 3mm | DIN 4102 | 3mm | B1 ,1...4mm | B1 ,1...4mm |
| FLAMABILITY 6mm | UL 94 | 6mm | V0 ,5V | V0 |
| MECHANICAL | | | | |
| 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/m ² | 4 | 2 |
| SHORE HARDNESS | DIN EN ISO 868/15sek | SCALE D | 85 | 83 |
| THERMAL | | | | |
| 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 ⁻⁶ K ⁻¹ | 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 |
| ELECTRICAL | | | | |
| 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 ¹⁵ | >10 ¹⁵ |
| SURFACE RESISTIVITY | IEC 60093 | Ω | >10 ¹³ | >10 ¹³ |
| 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.