

## Technical Data Sheet

# Trovidur<sup>®</sup> EC-FR

PVC-U

### Typical characteristics

- Clean Room Material

### Typical industries

- Clean-Room Technology
- Semiconductor Industry
- Semiconductor factory equipment
- Semiconductor Front-End applications
- Semiconductor Front-End Wet Bench

	Test method	Unit	Guideline value
<b>General properties</b>			
Density	DIN EN ISO 1183-1	g / cm <sup>3</sup>	~1,46
Water absorption	DIN EN ISO 62	%	0,2
Cleanroom Materials Flammability Test Protocol (Thickness 6...40 mm)	FM 4910		listed
<b>Mechanical properties</b>			
Yield stress	DIN EN ISO 527	MPa	50
Elongation at break	DIN EN ISO 527	%	20
Tensile modulus of elasticity	DIN EN ISO 527	MPa	3000
Notched impact strength	DIN EN ISO 179	kJ / m <sup>2</sup>	4
Shore hardness	DIN EN ISO 868	scale D	82
Ball indentation hardness	DIN EN ISO 2039-1	MPa	115
Compressive strength	DIN EN ISO 604	MPa	75
Bending strength	DIN EN ISO 178	MPa	80
<b>Thermal properties</b>			
Thermal conductivity	DIN EN ISO 8302	W / (m * K)	0,16
Vicat softening temperature	DIN EN ISO 306, Vicat B	°C	75
Service Temperature		°C	-15 ... +60
Heat deflection temperature	DIN EN ISO 75	°C	70
Coefficient of linear thermal expansion	DIN EN ISO 11359-2	mm/m K	~0,075



	Test method	Unit	Guideline value
Glow wire ignition temperature	DIN EN 60695-2-13	°C	990
Glow wire flammability index	DIN EN 60695-2-12	°C	960
<b>Electrical properties</b>			
Dielectric constant	IEC 60250		~3,2
Dielectric dissipation factor (10 <sup>6</sup> Hz)	IEC 60250		~0,02
Volume resistivity	DIN EN 62631-3-1	Ω * cm	>10 <sup>15</sup>
Surface resistivity	DIN EN 62631-3-2	Ω	>10 <sup>13</sup>
Dielectric strength	IEC 60243	kV / mm	12
Comparative tracking index	IEC 60112	CTI	600

