

## TECASINT 1031 black - halvfabrikat

### Kemisk beteckning

PI (polyimid)

### Färg

Svart

### Densitet

1.57 g/cm<sup>3</sup>

### Fillers

40 % grafit

### Huvud egenskaper

- mycket bra glid- och slitegenskaper
- mycket god termisk stabilitet
- mycket hög krypresistent
- Bra slitstyrka
- hög termisk och mekanisk kapacitet
- motstånd mot hög energi strålning
- låg termisk expansion
- känslig för hydrolysis i högre termiska intervall

### Målindustrier

- bilindustrin
- flygplan och rymdteknik
- kryogenteknik
- transportteknik
- varm glasteknik
- maskinteknik
- precisions teknik
- textil industrin

| Mekaniska Egenskaper             | parameter           | värde | enhet                            | norm                 | anmärkning  |
|----------------------------------|---------------------|-------|----------------------------------|----------------------|---|
| Draghållfasthet                  | 50 mm/min           | 58    | MPa                              | DIN EN ISO 527-1     | (1) eU<br>(2) eA  |
| Elasticitetsmodul (dragprov)     | 50 mm/min           | 6200  | MPa                              | DIN EN ISO 527-1     |   |
| Brottförlängning                 | 50 mm/min           | 1.6   | %                                | DIN EN ISO 527-1     |   |
| Böjållfasthet                    | 10 mm/min           | 83    | MPa                              | DIN EN ISO 178       |   |
| Elasticitetsmodul (böjningstest) | 10 mm/min           | 5900  | MPa                              | DIN EN ISO 178       |   |
| Brottförlängning (böjtest)       | 10 mm/min           | 1.4   | %                                | DIN EN ISO 178       |   |
| Kompressionsstyrka               | 10 mm/min           | 126   | MPa                              | EN ISO 604           |   |
| Kompressionsmodul                | 10 mm/min           | 2700  | MPa                              | EN ISO 604           |   |
| slagstyrka (charpy)              | max 7.5 J           | 16.5  | kJ/m <sup>2</sup>                | DIN EN ISO 179-1     | 1)  |
| Skårslahseghet (Charpy)          | max 7.5 J           | 3.6   | kJ/m <sup>2</sup>                | DIN EN ISO 179-1     | 2)  |
| Shore hårdhet                    | Shore D             | 84    |                                  | DIN EN ISO 868       |   |
| Värmeledningsförmåga             | parameter           | värde | enhet                            | norm                 | anmärkning  |
| Glasövergångstemperatur          |                     | 353   | °C                               | -                    | 1)  |
| termisk expansion                | 50-200°C            | 2.1 / | 10 <sup>-5</sup> K <sup>-1</sup> | DIN 53 752           | 2)  |
| termisk expansion                | 200-300°C           | 2.7 / | 10 <sup>-5</sup> K <sup>-1</sup> | DIN 53 752           | 3)  |
| Övriga egenskaper                | parameter           | värde | enhet                            | norm                 | anmärkning  |
| Vatten absorption                | 24 h in water, 23°C | 0.6   | %                                | DIN EN ISO 62        | (1) Corresponding means no listing at UL (yellow card). The information might be taken from resin, stock shape or estimation. Individual testing regarding application conditions is mandatory. |
| Brandklassning (UL94)            | corresponding to    | V0    |                                  | DIN IEC 60695-11-10; | 1)  |

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