Material Data Sheet ABS UL94 HB



Description

Reents Technologies ABS UL94 HB has been specifically developed for industrial applications and is characterized by its high process reliability. It is ideal for the production of components subjected to high mechanical stress. The material is electrically insulating.

Identification

| Name | ABS UL94 HB |
|---------------|--|
| Chemical Name | Acrylonitrile Butadiene Styrene |
| Usage | Ideal for manufacturing mechanically stressed industrial components. |

Advantages

- For industrial applications
- Flame retardant according to UL 94 HB
- Electrically insulating
- High mechanical stability

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Properties

Mechanical properties

| Test | Value | Unit | Methode |
|-----------------------------|---------------|-------|-----------|
| Density | 1.06 | g/cm³ | ASTM D792 |
| Flexural Modulus | 2550 | MPa | ASTM D790 |
| Flexural Strength | 78 | MPa | ASTM D790 |
| Tensile Modulus | 2350 | MPa | ASTM D638 |
| Tensile Strength | 49 | MPa | ASTM D638 |
| Elongation at Yield | 5 | % | ASTM D638 |
| Nominal Elongation at Break | 10 | % | ASTM D638 |
| Notched Impact Strength | 220 / 23°C | kJ/m² | ASTM D256 |
| Unnotched Impact Strength | 90 / -30°C | kJ/m² | ASTM D256 |

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Thermal Properties

| Test | Value | Unit | Methode | |
|-------------------|---------|---------|------------|--|
| VICAT A (VST) | 92 | °C | ASTM D1525 | |
| Melt Temperature | 180-200 | °C | ISO 3146-C | |
| MFR | 21 | g/10min | ASTM D1238 | |
| HDT/B | 85 | °C | ASTM D648 | |
| Shrinkage | 0.4 | % | ASTM D955 | |
| Rockwell Hardness | 110 | R-SCALE | ASTM D785 | |
| Flammability | UL94 HB | | | |

^{*}Temperature resistance tested at wall thickness of at least 4 mm.

Certificate

| REACH | Yes |
|----------------------|---------|
| RoHS | Yes |
| FDA | Yes |
| Chemically resistant | Yes |
| Flame retardant | UL94 HB |