



## PLEXIGLAS® Soundstop GS

### Product

PLEXIGLAS® Soundstop GS is a highly transparent grade of cast acrylic.

### Properties

In addition to the well-known and proven properties of PLEXIGLAS®, such as

- excellent light transmission and brilliance
- extremely high weather resistance
- ease of fabrication
- high surface hardness
- low weight – half the weight of glass
- 11times the impact strength of glass
- 100% recyclability,

PLEXIGLAS® Soundstop GS offers the following special features:

- It prevents drivers feeling they are driving through a “tunnel.”
- PLEXIGLAS® Soundstop GS is classed in the highest airborne sound reduction category (B3) of EN 1793-2, EN 1793-6, EN 16272-3-2, and also meets all requirements of EN 1794-1,2,3.
- Large noise barrier elements reduce the need for steel supporting structures and enhance the transparency of the noise barrier.
- PLEXIGLAS® Soundstop GS is available in transparent colors.

### Applications

These properties make PLEXIGLAS® Soundstop GS especially suitable for

- noise control along roads and railways
- wind barriers on bridges

### Machining

PLEXIGLAS® Soundstop GS can be machined just like standard PLEXIGLAS®.

### Physical Forms

PLEXIGLAS® Soundstop GS is available in the following sizes and thicknesses:

| Physical Forms |   |
|----------------|---|
| Standard size  | 3050 x 2030 mm,<br>4050 x 2030 mm,<br>5050 x 2030 mm,<br>3300 x 2380 mm |
| Thickness      | 12 – 15 – 20 – 25 mm  |

**Technical Data**

| Property  | Value                     | Test standard        |
|---|---------------------------|----------------------|
| Density   | 1.19 g/cm <sup>3</sup>    | ISO 1183             |
| Weight per unit area                                | 17.8 kg/m <sup>2</sup>    | 15 mm thick          |
| Tensile strength                                    | 70 MPa                    | ISO 527-2/1B/5       |
| Elongation at break                                 | 5 %                       | ISO 527-2/1B/5       |
| Flexural strength                                   | 98 MPa                    | ISO 178              |
| Modulus of elasticity                               | 3300 MPa                  | ISO 527-2/1B/5       |
| Weighted sound reduction index DLR                  | 29 dB at 12 mm            | EN 1793-2/ZTV-Lsw-06 |
| Weighted sound reduction index DLR                  | 30 dB at 15 mm            | EN 1793-2/ZTV-Lsw-06 |
| Weighted sound reduction index DLSI                 | 34 dB at 15 mm            | EN 1793-6            |
| Weighted sound reduction index DLSI                 | 35 dB at 15 mm            | EN 16272-3-2         |
| Weighted sound reduction index DLR                  | 32 dB at 20 mm            | EN 1793-2/ZTV-Lsw-06 |
| Weighted sound reduction index DLR                  | 33 dB at 25 mm            | EN 1793-2/ZTV-Lsw-06 |
| Light transmission<br>of clear-transparent elements | min. 92 %                 | DIN 5036             |
| Coefficient of expansion 0 to 50°                   | 70 · 10 <sup>-6</sup> 1/K | DIN 53752-A          |
| Max. permanent service temperature                  | 70 °C                     |                      |
| Vicat softening temperature                         | 110 °C                    | ISO 306-B50          |
| Poisson's ratio                                     | 0.37                      |                      |

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