

SONIC - 41 Specifications

Sonic – 41 foam is a mid-density \ low cost foam. Still light in weight, Sonic – 41 has strong strength to weight ratio.

Sonic – 41 can be used as an inner core material that can be bonded to materials including: aluminum, Aramid fiber, carbon fiber, glass fiber, Kevlar as well as many other common materials.

Applications for Sonic – 41: playground equipment, X-Ray & CAT SCAN medical tables, RC aircraft, marine and automotive products, speaker cones, as well as any application where a mid-density \ light weight inner core material is required.

Technical Specifications:

Nominal Density 1) ISO 845 Kg/m³: 48
Compressive Strength 2) ASTM D 1621 MPa: 06
Compressive Modulus 2) ASTM D 1621 MPa: 50
Tensile Strength 2) ASTM D 1623 MPa: 1.4
Tensile Modulus 2) ASTM D 1623 MPa: 55
Shear Strength ASTM C 273 MPa: 0.56
Shear Modulus ASTM C 273 MPa: 15
Shear Strain ASTM C 273%: 12
Thermal conductivity: 0.028 W/mK
Water vapour permeability: 4.0 m²/(s -10 -8)
Coefficient of linear expansion: 40 -10 -6/°C
Continuous temp. range: -200 to +70 °C
Max. processing temperature: +90 °C

Material test details:

- Typical density variation $\pm 10\%$. All values measured at +23°C.
- Continuous operating temperature is -200°C to +70°C.
- The foam can be used in sandwich structures, for outdoor exposure, with external skin temperatures up to +85°C.
- Operating conditions must be taken into consideration for the very low and high temperatures.
- Maximum processing temperature is dependent on time, pressure and process conditions.
- Normally Sonic foam can be processed at up to +90°C with minor dimensional changes.

SONIC S-61 Specifications

Sonic – 61 foam is a mid-density \ mid cost foam. Slightly higher in weight but still quite light, Sonic – 61 has very good strength to weight ratio.

Sonic – 61 can be used as an inner core material that can be bonded to materials including: aluminum, Aramid fiber, carbon fiber, glass fiber, Kevlar as well as many other common materials.

Applications for Sonic – 61: Marine and automotive products, X-Ray & CAT SCAN medical tables, RC aircraft, windmill blades, speaker cones, as well as any application where a mid-density \ light weight inner core material is required.

Technical Specifications:

Nominal Density 1) ISO 845 Kg/m³: 60
Compressive Strength 2) ASTM D 1621 MPa: 09
Compressive Modulus 2) ASTM D 1621 MPa: 70
Tensile Strength 2) ASTM D 1623 MPa: 1.8
Tensile Modulus 2) ASTM D 1623 MPa: 75
Shear Strength ASTM C 273 MPa: 0.76
Shear Modulus ASTM C 273 MPa: 20
Shear Strain ASTM C 273%: 20
Thermal conductivity: 0.029 W/mK
Water vapour permeability: 4.0 m²/(s · 10⁻⁸)
Coefficient of linear expansion: 40 · 10⁻⁶/°C
Dimension stability temperature: +105 °C
Continuous temp. range: -200 to +70 °C
Max. processing temperature: +90 °C

Material test details:

- Typical density variation ± 10%. All values measured at +23°C.
- Continuous operating temperature is -200°C to +70°C.
- The foam can be used in sandwich structures, for outdoor exposure, with external skin temperatures up to +85°C.
- Operating conditions must be taken into consideration for the very low and high temperatures.
- Maximum processing temperature is dependent on time, pressure and process conditions.
- Normally Sonic foam can be processed at up to +90°C with minor dimensional changes.

SONIC - 81 Specifications

Sonic – 81 foam is a high density \ highest cost Sonic foam we offer. Heavier than other Sonic foam materials we carry but still fairly light in weight, Sonic – 81 has excellent strength to weight ratio.

Sonic – 81 can be used as an inner core material that can be bonded to materials including: aluminum, Aramid fiber, carbon fiber, glass fiber, Kevlar as well as many other common materials.

Applications for Sonic – 81: Marine and automotive products, windmill blades \ wind energy products, speaker cones, as well as any application where a high density \ excellent strength to weight inner core material is required.

Technical Specifications:

Nominal Density 1) ISO 845 Kg/m³: 80

Compressive Strength 2) ASTM D 1621 MPa: 1.4

Compressive Modulus 2) ASTM D 1621 MPa: 90

Tensile Strength 2) ASTM D 1623 MPa: 2.5

Tensile Modulus 2) ASTM D 1623 MPa: 95

Shear Strength ASTM C 273 MPa: 1.15

Shear Modulus ASTM C 273 MPa: 27

Shear Strain ASTM C 273%: 30

Thermal conductivity: 0.031 W/mK 0.215 Btu.in/(ft².h.°F) EN 12667

Water vapour permeability: 4.0 m²/(s · 10⁻⁸)

Coefficient of linear expansion: 40 · 10⁻⁶/°C

Continuous temp. range: -200 to +70 °C

Max. processing temperature: +90 °C

Material test details:

- Typical density variation ± 10%. All values measured at +23°C.
- Continuous operating temperature is -200°C to +70°C.
- The foam can be used in sandwich structures, for outdoor exposure, with external skin temperatures up to +85°C.
- Operating conditions must be taken into consideration for the very low and high temperatures.
- Maximum processing temperature is dependent on time, pressure and process conditions.
- Normally Sonic foam can be processed at up to +90°C with minor dimensional changes.