

# industrial applications

## Modur

The perfect all-round model making rigid foam for professionals.



*PURe technology!*



Perfect on every scale: modur made by puren..

industrial applications

Whether professional model making or Rapid Prototyping: Shape up with slabstock or panels made of modur PUR/PIR rigid foam and make your designer heart beat faster.

**For velvet dreams in rigid foam.**

At the beginning of every idea and realization there is a plan, a drawing or a model showing the finished product on a scale. This applies specially for technical goods such as cars, trains or ships - but also for artistic designs such as decorations and promotional figures and shapes.

Frequently, these models have one thing in common: A core of modur rigid foam made by puren. For model making we provide panels and slabstock in various qualities and dimensions.

**Advantages**

- good stability
- low specific weight
- bulk densities from 30 to 300 kg/m<sup>3</sup>
- ideal for mechanical processing with all available tools and CNC robots
- may be processed/treated with any adhesive, primers, coatings, colors, varnishes etc.
- does not drop off while burning
- weatherproof, may be used from -30°C up to +120°C
- does not rot
- good cell elasticity
- water absorption only approx. 3 % by volume
- high rigidity

**Formats**

Slabstock and panels with customer-/project-specific dimensions

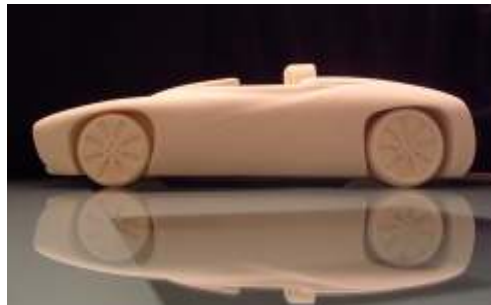
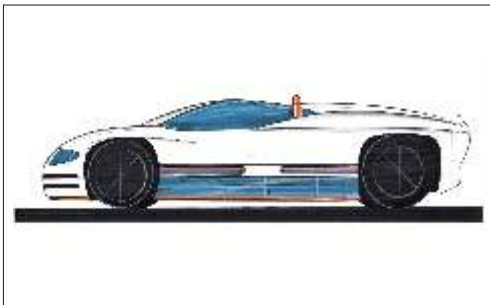
**Edges**

blunt

**Surface**

Generally ground and dedusted

modur is harmless from a biological and building ecology point of view, non-rotting, recyclable, mould- and mildew-resistant.



From computer graphics into a 1:10 and finally into a 1:1 model: modur makes the prototype mobile on 4 wheels.





## Modur high-performance material

|                     |   |
|---------------------|---|
| PUR/PIR-rigid foam: | CFC- and HCFC-free, slabstock, not laminated  |
| Characteristics:    | pressure-resistant, dimensionally stable, does not smolder, melt or drop off while burning, harmless from a biological and building ecology point of view, non-rotting, recyclable, mould- and mildew-resistant |

| Typ   | modur 30  | modur 80   | modur 100   | modur 145   | modur 200   |
|---|---|------------|-------------|-------------|-------------|
| Bulk density[kg/m³], DIN EN 1602:                           | ca. 31  | 77 - 82    | 95 - 102    | 135 - 145   | 186 - 205   |
| Compressive strength [kPa], DIN EN 826:                     | 170 - 210                                       | 650 - 750  | 900 - 1000  | 1700 - 2000 | 2600 - 3100 |
| Bending strength [kPa], DIN EN 12089:                       | 250 - 300                                       | 960 - 1300 | 1200 - 1400 | 2300 - 3000 | 2700 - 3300 |
| Traversal tensile strength [kPa], DIN EN 1607:              | 200 - 230                                       | 720 - 850  | 950 - 1000  | 1400 - 1600 | 2000 - 2300 |
| Traversal/shearing strength [kPa],DIN EN 12090:             | 120 - 160                                       | 360 - 420  | 450 - 520   | 700 - 820   | 1000 - 1300 |
| Thrust strength [kPa], DIN EN 12090:                        | 130 - 170                                       | 400 - 470  | 470 - 600   | 850 - 950   | 1400 - 1700 |
| Closed cell content [vol.%], ISO 4590:                      | generally for all types: 90 - 95                |            |             |             |             |
| Linear expansion coefficient [1/K], DIN EN 1604 (based on): | generally for all types: $5 - 8 \times 10^{-5}$ |            |             |             |             |
| Fire classification, DIN 4102:                              | generally for all types: B2                     |            |             |             |             |
| Temperature resistance [° C]:                               | generally for all types: -30 bis +120           |            |             |             |             |
| Formats [mm]:   | generally for all types: 2000 x 1000 x 100      |            |             |             |             |

Other formats, fire classifications, temperature resistances or bulk densities upon request.  
We reserve the right to technical changes and modifications.



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