





## Materials

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The way in which Biala is constructed allows the chair to be dismantled at the end of its working life in order to recycle most of the parts. A detailed list of the materials used follows:

### **Polyamide (PA6/PA6.6)**

Properties: The flash point of the material lies at 400 °C. The ignition temperature lies at 450 °C. Thermal decomposition occurs when the part is subjected to a temperature of 350 °C.

Recycling: Yes – the parts can be recycled.

System parts: Castors, glides

### **Steel parts**

Properties: The parts are of very high strength with regard to breakage, traction, torsion and bending. The level of strength is higher or lower, depending on the quality grade. The parts are corrosionresistant after electroplating. Thermal decomposition occurs when the part is subjected to a temperature of 1100 °C.

Recycling: Yes – the parts can be recycled.

System parts: Back frame

### **Steel parts – coated (resin)**

Properties: The parts are of very high strength with regard to breakage, traction, torsion and bending. The level of strength is higher or lower, depending on the quality grade. The parts are corrosionresistant after electroplating. Epoxy resin powder is used to coat the parts. Thermal decomposition occurs when the part is subjected to a temperature of 1100 °C.

Recycling: Yes – the parts can be recycled.

System parts: Screws, column, complete lever, fixing bracket, fixing plates, cover, return mechanism

### **Aluminium (pressure die casting) coated and polished**

Properties: The alloy corresponds to the DIN 1725 standard. Aluminium die casting has a high level of strength, is easily shaped and offers several finishing methods. There are different polishing levels as well as different epoxy resin powder coatings in an extensive range of colours.

Recycling: Yes – the parts can be recycled.

System parts: 5-prong base, 4-prong base, seat support

### **PUR foam**

Properties: All PUR foam parts (polyurethane) in versions made of cold cured foam or integral foam are produced without any CFCs and are created by means of a polyaddition reaction of isocyanate and polyether polyol. This results in cellular material with elastic properties. Thermal decomposition takes place at a temperature of over 180 °C, and the ignition temperature is between 315 °C and 370 °C.

Recycling: Yes, the parts can be sent for either materials or thermal recycling.

System parts: seat cushion, backrest foam

### **Polypropylene (PP)**

Properties: The flash point is not applicable. The ignition temperature lies at 330 °C. Thermal decomposition occurs when the part is subjected to a temperature of 300–320 °C.

Recycling: Yes – the parts can be recycled.

System parts: Plastic plate

### **Wood (European oak)**

Properties: This light to mid-brown, ring-porous wood is clearly structured with large rays. Oak woods are usually easy to stain, matt, varnish and paint with any medium.

We use oak with lightening varnish, black-stained oak and walnut-stained oak.

Recycling: Yes – the parts can be recycled.

System parts: Wooden frames

### **Plywood**

Properties: It is composed of at least three layers of wood, whose fibres are glued and pressed at an angle of 90°. Direction-specific material properties such as swelling and shrinkage are homogenized via the board surface, the resultant material no longer expands or contracts to any significant degree – in contrast to solid wood; the wood is thus “locked”. The type, number and arrangement of the wood layers produce the board structure and its specific stability properties.

Recycling: Yes – the parts can be recycled.

System parts: Upholstery panels

### **Cover materials**

Properties: Detailed information on the composition of materials can be found on the respective fabric and leather cards.

Recycling: Yes – some of the unblended cover fabrics made from natural fibers can be returned to the suppliers. There, the covers are shredded and reused to produce new fabric. Cover fabrics made from synthetic materials can be recycled. The methods used to tan and dye the leather covers allow them to be composted without problem.

System parts: Cloth and leather covers, woven polyester

### **Additional information – connections**

Nava is made from a large number of single parts. The parts are all mechanically joined (= can be dismantled, detached). These plug-in and screw connections allow the different types of material to be separated when the chair is dismantled.

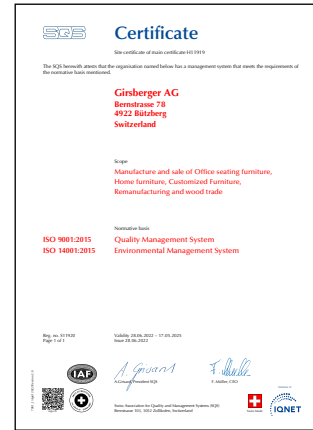
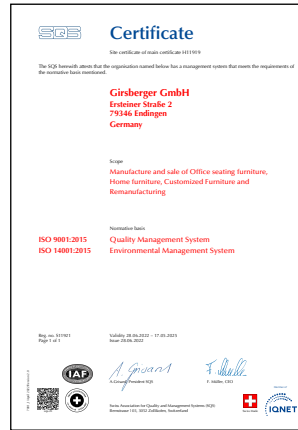
# Certificates

## Quality

Girsberger has extremely high quality assurance standards and is certified according to DIN EN ISO 9001.

## Environment

Since 2007, Girsberger has operated an environmental management system certified to the EN ISO 14001 standard, which obliges us to continually improve our environmental performance. All materials used for the Biala model series can be sorted into material types and recycled.



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