brunner ::

ray work

Product environmental information

Environmental awareness at Brunner

Corporate culture

Environmental protection at Brunner
At Brunner, protecting the environment is an important part of our corporate culture. Our DIN EN ISO 14001 certification demonstrates that we are committed to protecting our planet within our business operations. In order to continually improve ourselves and our processes throughout the entire value-added chain, we rely on DIN EN ISO 9001 quality management systems to provide operational control. Through economical use of valuable resources and efficient management of our production processes, we at Brunner want to continue taking pioneering steps in the future. We want to set an example when it comes to protecting the environment.

Energy management
In addition to operating a photovoltaic system with 270 kWp, we regularly analyse our water and energy consumption so that we can use this knowledge to take measures to optimise this consumption.

Waste management
We are constantly looking for ways to reduce manufacturing waste in our factory. With input from many of our suppliers, we take advantage of reusable packaging: packaging materials such as cardboard boxes are reused. To minimise fabric and leather waste, computer-controlled systems ensure cutting waste optimisation. Other production waste is correctly sorted, separated, collected and disposed of by a certified recycling company.

Transport and logistics
All Brunner products are transported within the Federal Republic of Germany using our own commercial vehicles that conform with state-of-the-art technology with regards to consumption and exhaust emission standards. Optimised route planning and vehicle loading ensures high efficiency when it comes to transporting goods to the customer. When shipping within and outside Europe, shipping is handled by qualified forwarding agents or goods are collected by the customer directly.

Material procurement
Our suppliers are our partners. Long transport routes can be avoided by favouring local suppliers. In addition, we also select preferred certified suppliers. When procuring our components, we ensure that they comply with the limit values stipulated in current regulations and do not contain any substances that pose a health risk. Brunner GmbH assumes no liability for materials provided by the customer.

Usage, separation and disposal
Our furniture is designed for long-lasting use. High availability of spare parts and our repair service mean that replacements are quick and a wide range of components can be retrofitted. For disposal, all parts can be sorted and separated.

Environmental awareness at Brunner

Product life cycle

Product development
For us, environmental protection begins at the development phase. Each and every product is developed with sparing use of resources in mind. This involves creating a timeless design that can be used for many years to come, as well as designing individual moulded parts so that, where possible, they can be replaced, disassembled into their components and disposed of separately. Our products' most important plastic components are labelled systematically (according to DIN ISO 11469).

Safety
All our chairs undergo safety testing. The internal testing equipment used for this is subject to periodic inspections by external inspection bodies. Much of our portfolio is also subject to an official safety inspection (German 'Geprüfte Sicherheit' or GS mark for 'Tested Safety').
It is tested according to the current valid standards for the public and commercial sectors: chairs according to DIN 16139 and, where applicable, also according to DIN 68878, and tables according to DIN 15372. Office swivel chairs fall under the testing requirements of DIN 1335. Our partition systems are developed and tested according to DIN 1023.

For more information and to download the GS certificates, go to https://www.brunner-group.com/sustainability.

Fire protection
Contract furniture for use in public buildings must fulfil certain fire protection requirements. The focus of this is the prevention and containment of fire through self-extinguishing or flame retardant construction materials. In Germany, DIN 4102 is applicable for the classification of fire behaviour of building materials. In Europe, the assessment of the ignitability of furniture is regulated by EN 1021 Parts 1 and 2. Property requirements can vary depending on the building use. Country-specific differences must also be taken into account.

For more information, see https://www.brunner-group.com/fire-protection.

To fulfil certain fire protection requirements, the use of flame retardants is essential. This primarily concerns upholstery foams.

Packaging
We want to protect our furniture in the best possible way when it is en-route to our customers, but, at the same time, we also strive to keep transport packaging to a minimum. As packaging materials, we use cardboard boxes, felt coverings as well as films and edge protection made of polyethylene (PE). The cardboard boxes used are standardised with our suppliers so that they can also be used for our end products. The result is almost no additional packaging material. All cardboard boxes are fully recyclable. When felt covers are used, they are 100% returned and re-used. Use of PE film is kept to a bare minimum, edge protection is used selectively as required. Both materials are fully recyclable. The packaging concept is constantly optimised and developed – especially with regard to its sustainability.

Cleaning and care instructions
We want to support you in maintaining the appearance and functionality of your Brunner furniture for as long as possible. That's why we have drawn up cleaning and care instructions for the various materials.

The cleaning and care instructions can be found at https://www.brunner-group.com/hygiene.
For more information on 'Materials and fabrics', visit brunner-group.com/en-DE/products/materials-and-fabrics/
If you have further questions or require more assistance, please don't hesitate to get in touch with your Brunner contact partner or our service department at service@brunner-group.com.

Environmental awareness at Brunner

Materials and certificates

Metals and metallic surfaces
Brunner predominantly uses steel and die-cast aluminium. By law, both metals always contain a certain percentage of recycled content and are 100% recyclable. We use only ecologically sound materials and surface finishings that do not contain heavy metals such as mercury, cadmium or lead. We use chrome III/VI for chroming. This production process is fully automated. Remaining stocks are processed without contaminating wastewater and in compliance with stringent statutory requirements of the European area. The powder coating on our metallic surfaces contains only organic binding agents, is REACH-compliant and contains no hazardous substances (SVHC). All metallic surfaces are low-emission and do not present any risk to health.

Wood, wooden composite and decorative coating
Brunner has been awarded PEFC certification (Programme for the Endorsement of Forest Certification Schemes) – a certification that provides assurance that wood and wooden composites can be shown to come from ecologically, economically and socially sustainable forestry. The wooden composites we use comply with emissions class E05 (formaldehyde emission limit) and contain no biocides such as pentachlorophenol (PCP) or lindane. Emissions of volatile organic compounds (VOCs) also remain below the stipulated limit values. The HPL finishes used comply with EN 438, are certified according to RAL-UZ 76 (BLUE ANGEL) and are approved for contact with foods.
Tropical woods are used exclusively for lightweight table tops. Due to their weight, tropical woods have the appropriate qualities for this. These worktops also comply with the currently valid provisions of the Ordinance on the Prohibition of Chemicals.

Plastics
We primarily use thermoplastics such as polyamide, polypropylene and ABS plastics. The plastics used are within the limit values for volatile organic compounds (VOCs), plasticisers/phthalates and polycyclic aromatic hydrocarbons (PAHs). They comply with the current REACH regulation. Where possible and depending on the product in question, no release agents are used when manufacturing our plastic components.

Upholstery foams
The upholstery foams we use are moulded polyurethane foam or cut polyether foam. They are obtained from reputable European manufacturers. All upholstery foams used are free from formaldehyde (methanal) and physical propellants such as CFCs, HCFCs or methylene chloride. No heavy metals are used. Compliance with limits on volatile organic compounds (VOCs) and compliance with the REACH regulation is ensured at all times due to regular inspections.

Textiles
Almost all cover fabrics in our standard range have been awarded the EU Ecolabel or STANDARD 100 by OEKO-TEX®, which means they have been tested for azo dyes, formaldehyde, nickel and compliance with the REACH regulation and SVHC Candidate List. Our leather collections torro and sevilla 2 have also been awarded the BLUE ANGEL and have therefore already been tested for harmful substances.

Environmental awareness at Brunner

Dyes, paints and adhesives
To varnish our beech surfaces, we use a high-quality UV-hardening water-based varnish system. Varnishing is fully-automated, varnish residues are collected, reprocessed and reused. The varnish used and the stains for our beech surfaces are water-based and therefore low-emission (VOC). An appropriate water-based varnish can also be used for our oak surfaces.
Only water-based dispersion adhesive with no organic solvents is used to secure the upholstery foams.
Bonding of cover materials to upholstery foams is, where possible, prevented by the design or combined with a solvent-based adhesive. We are constantly working on a reduction.
All materials used are REACH-compliant, fully cured and pose no risk to health.

Recyclability

We consider recyclability to be the material recycling of the raw material after it has been melted down. Recyclability is possible to varying degrees depending on the material. Our calculations for recyclability are therefore based on specifications from suppliers, organisations or industry averages. The potential for recycling may vary depending on local regulations.
Foams, for example, can be processed into granular material and re-used. Metals are fully recyclable. Plastics such as polypropylene and polyamide are thermoplastics and are also 100% recyclable. Wood can be disposed of thermally and thus contribute to energy production, or it can be chopped up and processed to create other wooden composites.

Certifications

Certification for harmful substances
There are usually significant overlaps across the majority of certifications. However, there are also differences in the underlying limit values. Brunner made a concious decision to choose 'TÜV Tested for harmful substance and emissions', because we believe this is the most meaningful. All relevant materials have undergone emission and material testing according to test specification 2 PfG S 0121/02.19 for upholstered seating or 2 PfG S 0120/12.19. The materials to be tested have been carefully selected so that they can cover other models in our portfolio and can be used as a substitute on all models.

Emissions testing is subject to the following criteria, for example:
- GS specification incl. testing according to AfPS GS 2014:01 PAK
- Compliance with the Ordinance on the Prohibition of Chemicals and the REACH regulation
- Emissions of volatile organic compounds (following DIN ISO 16000)
- Formaldehyde emission of wood-based materials according to DIN EN 717
- Compliance with the German AgBB specifications

Material testing includes compliance with strict limit values regarding:
- biocides and wood preservatives
- polycyclic aromatic hydrocarbons (PAHs)
- plasticisers/phthalates
- organostannic compounds
- certain dispersion and azo dyes
- flame retardants
- heavy metals

We are happy to provide more detailed information.

The certification includes annual monitoring audits. The list of certified models is constantly increasing. An up-to-date version of the certificates can be found here:

Seating furniture

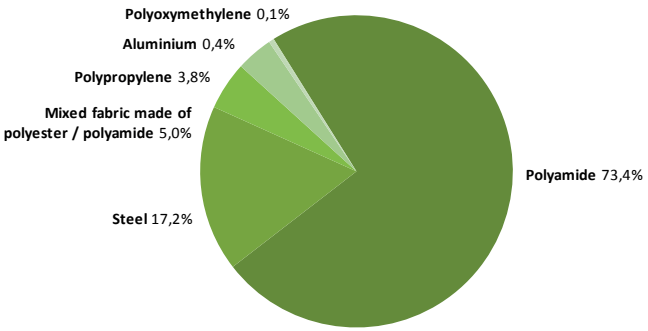
Tables

Building certification
A number of characteristics mean that Brunner products can contribute to a good rating in case of certification for sustainable buildings such as LEED. Please don't hesitate to contact us if you would like more information.

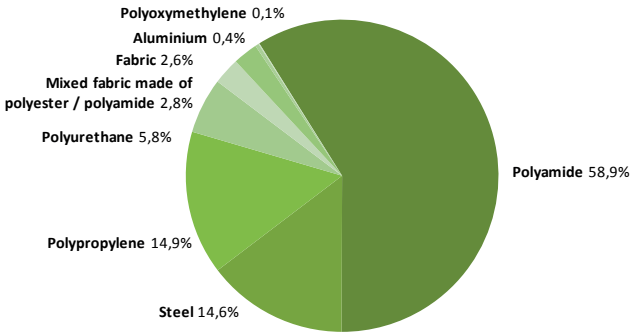
ray work 9220 | 9223 | 9225

Model overview recycling contents

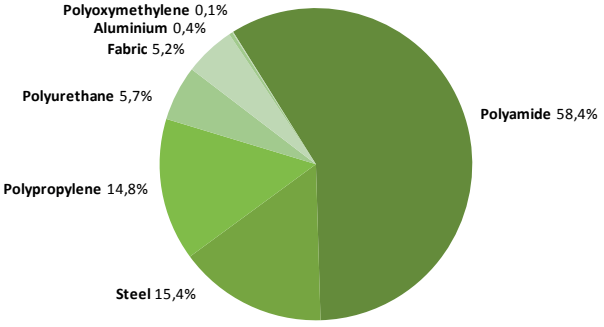
ray work 9220
Total weight: 9,0 kg
Recycled content: 8,2 %
Recyclability: min. 99 %*



ray work 9223
Total weight: 10,7 kg
Recycled content: 6,9 %
Recyclability: min. 99 %*



ray work 9225
Total weight: 10,7 kg
Recycled content: 6,9 %
Recyclability: min. 99 %*

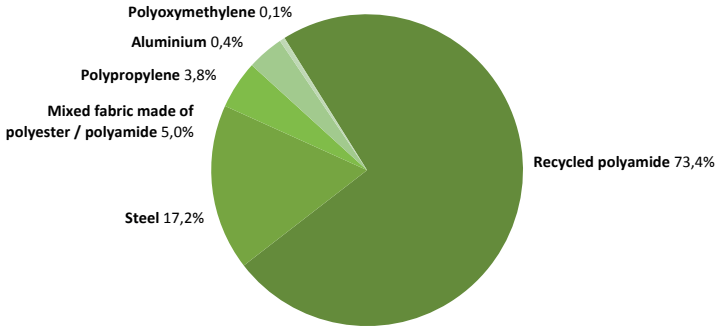


* Adhesives, varnishes, oils and greases are excluded from recyclability. These are neglected due to the low quantity share in the material list. For the assessment of recyclability, an average quantity share of 2% of the product is assumed. The Revive 1 collection was used as an example for the calculations of the fabric cover.

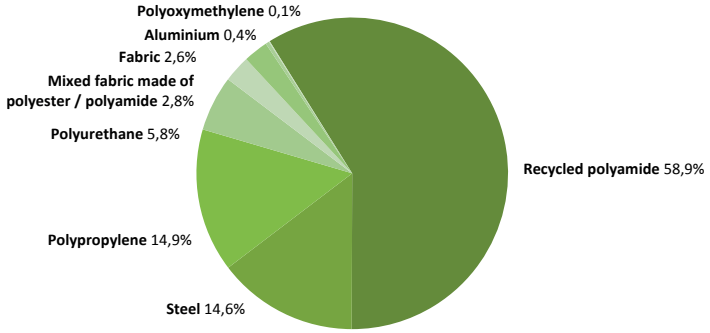
ray work 9220 | 9223 | 9225

Model overview recycling contents

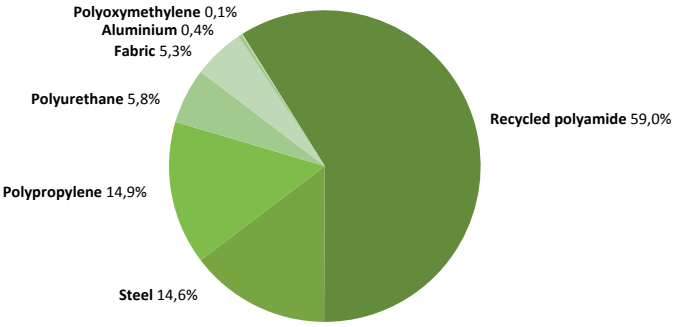
ray work 9220, made of recycled polyamide
Total weight: 9,0 kg
Recycled content: 59,6 %
Recyclability: min. 99 %*



ray work 9223, made of recycled polyamide
Total weight: 10,7 kg
Recycled content: 48,2 %
Recyclability: min. 99 %*



ray work 9225, made of recycled polyamide
Total weight: 10,7 kg
Recycled content: 48,2 %
Recyclability: min. 99 %*



* Adhesives, varnishes, oils and greases are excluded from recyclability. These are neglected due to the low quantity share in the material list. For the assessment of recyclability, an average quantity share of 2% of the product is assumed. The Revive 1 collection was used as an example for the calculations of the fabric cover.