SUSTAINABILITY PROFILE

RAY

brunner ::

PRODUCT FEATURES

The ray conference swivel chair combines a lovely flowing design with ultimate comfort. The swivel chair with a low back, meanwhile, has a complex design on the inside since there is a plastic seat shell with comfy slats that adapt to the user's body underneath the upholstery. And then there is the innovative tilting mechanism. This is integrated in the cast joint between the attractive V-shaped seat support and the elegant four-foot base, ensuring radial-kinetic activation that has a positive impact on circulation and fitness levels.

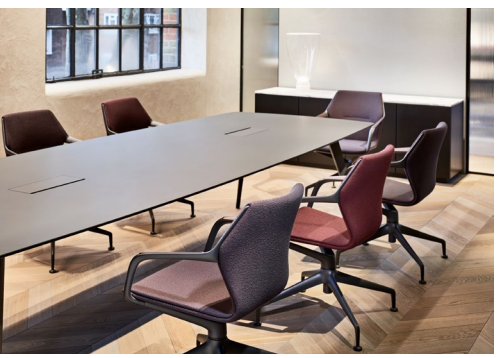
Optimum
body adaptation

Promotes
'active sitting'

Numerous options
within the range

Slim and
dynamic design

REFERENCE MODEL



The **ray 9252** model was used for the following analyses as representative of the ray product series.

The standard equipment of the model includes:

- V-shaped seat support linked directly to armrest in aluminium die cast, polished, integrated in the cast joints made of chromed full steel. 4-star base and gliders made of polished aluminium die cast.
- Thanks to its intelligent, dynamic kinetic mechanism with permanently elastic high compression springs, there's no need to make individual movement resistance settings.
- Shell with polygonal flexibles lamellas made of impact-resistant polypropylene consisting of a glass-fibre reinforced H-shaped core component and an elastic outer layer.
- Fully upholstered shell with separated moulded foam parts for seat and back.

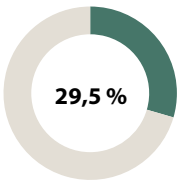
OTHER MODELS IN THE SERIES

9206 | 9207 | 9208 | 9209 | 9264 | 9262 | 9232 | 9234 | 9236

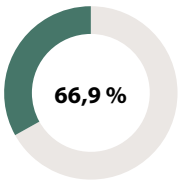
MATERIALINFORMATION

The high-quality raw materials we use in our production processes are at the heart of our furniture products. From the specification to the finished furniture product, environmental and health aspects are important to us every step of the way. It is thanks to our care and attention that our customers can rely on carefree comfort with every piece of our furniture. And we never want to stop improving, so we are forever looking for sustainable alternatives with promise for our portfolio.

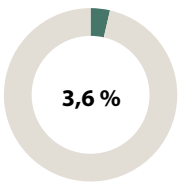
Plastics	**g**	**%**
Polypropylene	3000	21,5
Polyurethane	1018	7,3
Polyamide	84	0,6
PTFE	14	0,1



Metals	**g**	**%**
Aluminium	7567	54,2
Steel	1771	12,7



Cover material	**g**	**%**
Textile	504	3,6

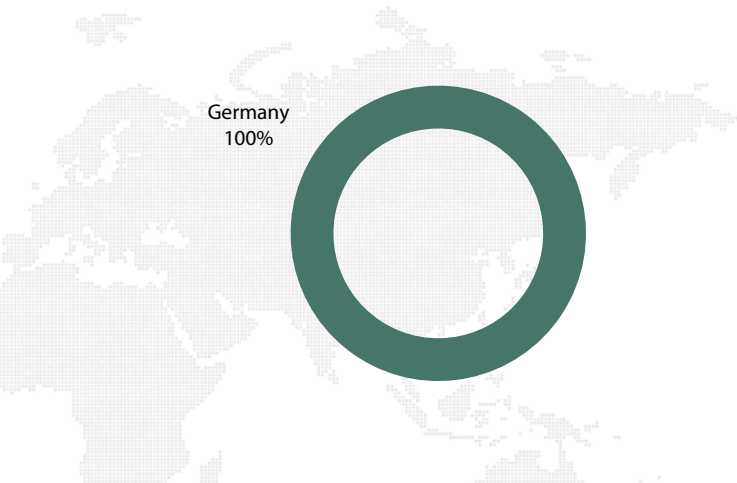


Total	**13958**	**100,0**

Packaging	**g**	**%**
Cardboard	3000	42,3
Bubble wrap	59	0,9
PU Protection	30	0,4
Inca pallet	4000	56,4
Total	**7089**	**100,0**

- All materials used are REACH-compliant and do not contain any SVHC candidates above 0.1% by mass
- The following substances and compounds are not used in the manufacture of the components:
  - Halogenated organic blowing agents chlorofluorocarbons (CFCs), partially fluorinated hydrocarbons (HFCs), partially halogenated chlorofluorocarbons (HCFCs)
  - Aniline-based amines
  - Polyvinyl chlorides (PVC)
  - Conflict minerals (tin, tantalum, tungsten, gold)
  - Polycyclic aromatic hydrocarbons (PAHs)
  - Per- and polyfluoroalkyl substances (PFAS)
- Plastics with a part weight of ≥50 grams are usually labelled for recycling in accordance with ISO 11469.

SUPPLY CHAIN



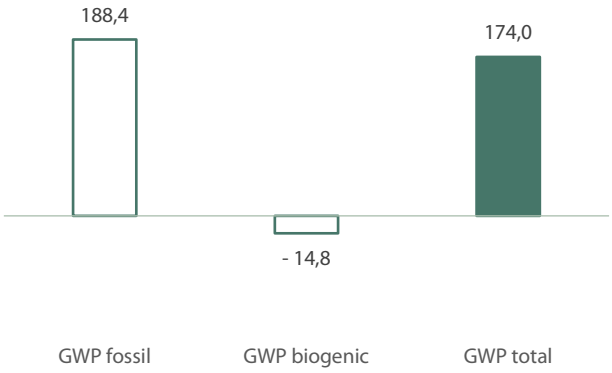
Our supply chain is characterised by a strong network within Europe, whereby we mainly rely on regional and European partners. This short supply chain enables us to operate efficiently and sustainably, as transport routes are minimised and cooperative relationships are strengthened.

The components of the ray 9252 are manufactured in the following countries:

LIFE CYCLE ANALYSIS[1]

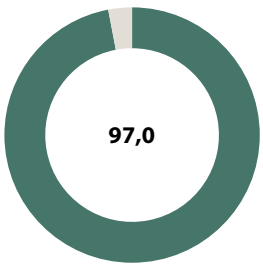
GWP total	174,0 kg CO_2e
GWP fossil	188,4 kg CO_2e
GWP biogenic	- 14,8 kg CO_2e
Depletion of the ozone layer	1,49E-06 kg $CFC_{-11}e$
Acidification	0,17 mol H^+e
Smog	0,11 kg NMVOCe
Energy consumption	208,0 kWh
Water consumption	0,86 m^3e

CO_2 footprint[2] [kg CO_2e]



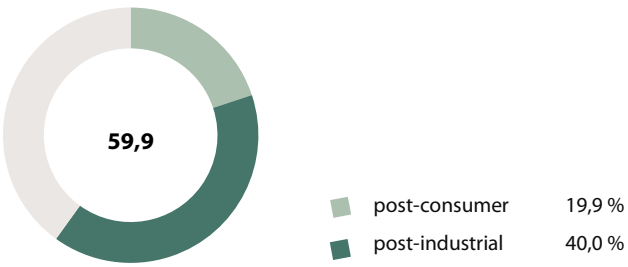
OTHER KEY FIGURES

Recyclability[3] [%]



The recyclability of a product refers to the proportion that can be fed into a recycling process at the end of its service life.

Recycled content[4] [%]



The recycled content indicates the percentage of the product that consists of already recycled material in relation to the total weight. A distinction is made between two types of recyclates. Post-consumer recyclates are obtained from end consumer waste. Post-industrial recyclates, on the other hand, are based on plastic waste generated during the processing of plastics. As post-industrial recyclates are produced by businesses, they are also referred to as pre-consumer recyclates.

[1] A1-A3, according to EN 15804+A2

[2] A1-A3 according to EN 15804+A2. The basis for the calculation is the functional unit (defined as the product unit), which is determined by the total weight of the product. The cradle-to-grave perspective is applied.

[3] The efficiency of recycling varies depending on the type of material. Our calculations on recyclability are therefore based on information from suppliers, industry organisations or industry averages. It should be noted that the potential for recycling may vary depending on the applicable local regulations. Adhesives, paints, oils and lubricating greases are excluded from recyclability. These are disregarded in the list of materials due to the small quantities involved.

[4] The recycled content is calculated in relation to the total weight of the product without packaging. The determination of the value is based on information from suppliers and other available sources. The information may be industry averages, industry standard values or other data. However, changes in the market or in the manufacturing processes can influence the values in different directions.

CERTIFICATIONS & LABELS

The certifications and labels listed below are available for the ray.

Manufacturing

Place of manufacture: Rheinau, Germany.
- The production facility is ISO 9001 and ISO 14001 certified.
- 0 % Waste to landfill

Product

TÜV tested for harmful substances & emissions
ray 9206, 9207, 9252 are certified.

Material

EU Ecolabel
Approximately half of all fabrics in our standard range are certified with the EU Ecolabel.

OEKO-TEX®
Some of the fabrics in our standard range have been awarded the OEKO-TEX® certificate.

Greenguard Gold
Most of the textiles supplied by Kvadrat in our standard range have been awarded the Greenguard Gold certificate.

Blue Angel
Both our leather collections are certified with the Blue Angel.

CONTRIBUTIONS TO BUILDING CERTIFICATIONS

Brunner products can contribute to points for sustainable building certification, such as LEED and WELL, due to various features. We will be happy to assist you if you require further information.

FURTHER INFO & CONTACT

Further information on sustainability at Brunner can be found online at brunner-group.com

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