Environmental Product Declaration

In accordance with ISO 14025, ISO 21930 and EN 15804:2012+A2:2019 for:

GETACORE worktops - thin version

Westag AG WESTAG

Programme: Programme operator: EPD® registration number: Publication date: Valid until: The International EPD® System, <u>www.environdec.com</u> EPD® International AB S-P-06400 2022-07-19 2027-07-18

An EPD® should provide current information and may be updated if conditions change. The stated validity is therefore subject to the continued registration and publication at www.environdec.com







General information

Programme information

Programme:	The International EPD [®] System					
Address:	EPD® International AB Box 210 60					
	SE-100 31 Stockholm Sweden					
Website:	www.environdec.com					
E-mail:	info@environdec.com					

CEN standard EN 15804 serves as the Core Product Category Rules (PCR)

Product category rules (PCR): PCR 2019:14 Construction Products And Construction Services. Version 1.11.

PCR review was conducted by: the Technical Committee of the International EPD® System. Chair of the review is Claudia A. Peña. The review panel may be contacted via info@environdec.com

Independent third-party verification of the declaration and data, according to ISO 14025:2006:

EPD® process certification

EPD® verification

Third party verifier: Ugo Pretato, Approved individual verifier, Studio Fieschi & Soci C.so Vittorio Emanuele II, 18, 10123, Torino, Italy. <u>www.studiofieschi.it</u> Approved by: The International EPD[®] System

Procedure for follow-up of data during EPD® validity involves a third-party verifier:

 \Box Yes \boxtimes No

The EPD[®] owner has the sole ownership, liability, and responsibility for the EPD[®].

EPD[®]s within the same product category but from different programmes may not be comparable. EPD[®]s of construction products may not be comparable if they do not comply with EN 15804. For further information about comparability, see EN 15804 and ISO 14025.



Company information

Owner of the EPD®:

Westag AG (from now on referred to as 'Westag'), Hellweg 15, 33378 Rheda-Wiedenbrück, Germany

Contact: info@westag.de

Description of the organisation:

Westag AG is a German manufacturer of wood-based products for interior finishing and building construction. Its headquarters are located in Rheda-Wiedenbrück and its second production site is based in Wadersloh. At these sites, the company manufactures a broad range of products — from doors, frames, kitchen worktops and window sills, to panels with high-pressure laminates, solid surface materials and coated plywood panels. In the business year 2021, Westag with its roughly 1,200 employees generated €224,3 million in sales.

Product-related or management system-related certifications:

Westag is, amongst other certification schemes, certified according to ISO 9001:2015, ISO 50001:2018, ISO 14001:2015, ISO 45001:2018, FSC and PEFC.

Name and location of production site(s): Westag AG, Mauritz 64, 59329 Wadersloh, Germany Westag AG, Hellweg 15, 33378 Rheda-Wiedenbrück, Germany



Product information

Product name: Getacore® worktops – thin version

Product identification:

Countertop with quality chipboard substrate type P2 according to EN 312 in two different thicknesses (16mm and 25mm) faced with Getacore[®] Smart sheet (3mm) and reverse side with Getalit[®] HPL (0,7mm) balancer. The front edge is 10 mm of Getacore[®] material and glue quality D3 according to EN 204/205

Product description:

Based in the heart of Europe, the Getacore® manufacturing facility can handle large and small orders promptly and efficiently. Additionally, the brand offers a selection of sinks and basins in a series of contemporary styles. To enhance one's project and keep costs in line, customers may combine Getacore® products with surfaces in matching colours from partner brands such as FENIX® NTM and Getalit[®].

The thin Getacore[®] worktop is a composite element consisting of acrylic bonded Getacore[®] Smart sheet, chipboard substrate, Getalit[®] HPL (high-pressure laminate) and agglutinates compounds (see tables 2 and 3). In addition to saving material and weight, the thin worktop looks elegant and stylish. Scratches and signs of use can be easily removed by sanding the surface so that the worktop can be renovated to its original condition without much effort. Replacement by repair can also be avoided in the event of damage. Getacore[®] is safe in contact with food, durable, easy to clean, repairable, non-porous and seamless joint, and easy to start processing. Getacore[®] Smart is a high-performance produKct delivering superior colour consistency via its Made-in-Germany production process. These impressive features permit the brand's products to stand out from the competition and provide the perfect set of tools when working in the commercial, retail, residential and hospitality sectors.

UN CPC code: Not available



LCA information

Functional unit / declared unit:

- 1 square meter of finished Getacore® 19,7mm worktop with a grammage of 16,19 kg/m²
- 1 square meter of finished Getacore[®] 28,7mm worktop with a grammage of 21,47 kg/m²

Reference service life:

Due to the wide range of applications (e.g. desks, kitchens, bathrooms, worktops), no single reference service life can be established.

Geographical scope:

The geographical scope of this EPD[®] is the EU.

Time representativeness:

Primary data were collected internally. The production data refer to an average for the year 2019.

Database(s) and LCA software used:

The **ecoinvent** and **Carbon Minds** databases provided the life cycle inventory for the raw and process materials used in the background system. The used databases are *ecoinvent 3.8* and *cm. chemicals – global insights*. The LCA software used in **SimaPro 9.3**

Description of system boundaries:

According to the standard EN 15804:2012+A2:2019 (E) and PCR 2019:14 CONSTRUCTION PRODUCTS (version 1.11), the system boundary is *cradle to gate with modules C1-C4 and module D* (A1-A3 + C + D) (see figure 1). The life cycle stages A4-A5, and B1-B7 were excluded from the LCA study.

Getacore® Smart production

The manufacturing process starts with the reception of raw materials to produce the in-house acrylic resin that is used as the main ingredient in the production of the Getacore[®] Smart sheets. This resin is formulated and produced at the Westag Rheda-Wiedenbrück site and transported 15km to Westag Wadersloh where the rest of the production stages occur. At Wadersloh, the acrylic resin is mixed with fillers, hardeners, catalysts, Getacore[®] granulates (from previous production), and pigments. Once the Getacore[®] sheets are produced, they are cut into smaller sizes and partly ground. Finally, the smaller sheets undergo a tempering process to enhance their physical properties and are sandpapered to improve their appearance.

Getalit[®] HPL production

The Getalit[®] HPL production takes place at the Westag Rheda-Wiedenbrück site. The process starts with the reception of raw materials to produce the resins used to impregnate natural fibers. Once the fibers have been homogeneously impregnated they go through a high-pressure lamination process in the presence of

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heat. Finally, the panels are cut-sized and transported to Wadersloh to be used in the Getacore® worktop production.

GC-Adhesive production

To deliver a colour homogeneous finish product, the Getacore[®] worktop uses a binder specially formulated to glue together the Getacore[®] Smart top material with the Getacore[®] edges. The manufacture of the GC-Adhesive starts with the reception of raw materials to produce the so-called component A. Following, the component A is transported 80km to an external company where the so-called Component B is mixed with the Component A. Finally, the GC-Adhesive is packed in a cartridge specially designed to be used by Westag and transported back to Wadersloh.

Chipboard

The core material used by the Getacore[®] worktops is a substrate of chipboards supplied by the company Unilin. These Chipboards are wood-based panels with 3 layers: two surface layers with a fine structure and a core layer with a coarser structure. The layers consist of wood chips that are bonded by a thermoharding resin and mixed with additives to add application-specific properties such as fire retardancy or moisture resistance. The wood chips are a combination of recycled and recovered wood sourced in and around Belgium. About 90% of the wood used in the chipboards is post-consumer scrap and 10% is pre-consumer waste. The average composition of the chipboards used in the worktops is 84% wood chips, 10% binder, 5.5% moisture and 0.5% water repellent agent.

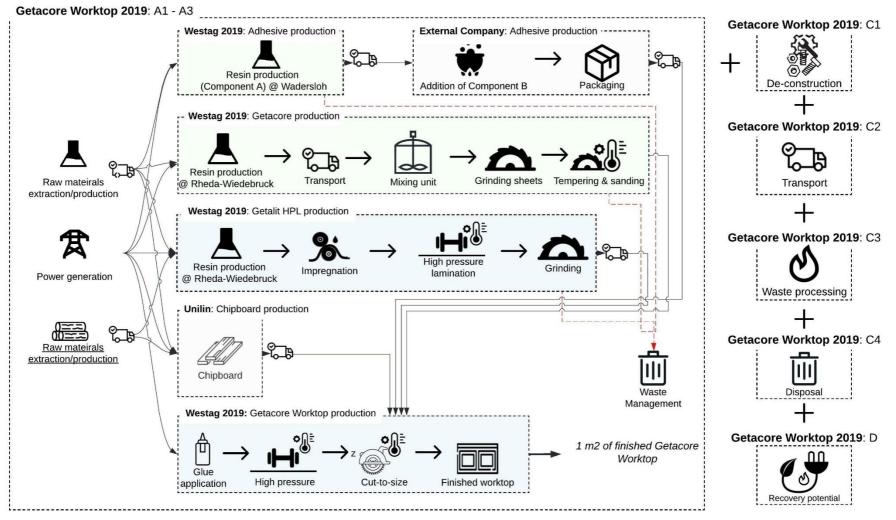
Getacore® worktop assembly

The Getacore[®] worktop assembly, performed at Wadersloh, begins by applying a binder on one side of the chipboard where the Getalit[®] HPL is attached (backside). The same process is performed on the other side of the chipboard where the Getacore[®] sheet is added (top side). Once the three materials are together, they undergo a pressing process to ensure a uniform and adequate bond between all the materials. The next step is to add the edge material to the bonded panel using the GC-Adhesive to provide a seamless appearance. Finally, the imperfections, such as excess adhesive, are sanded away.

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System diagram:





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More information:

Name and contact information of LCA practitioner: Pauline Vantilt; <u>p.vantilt@nemho.com</u> Amin Salgado; <u>a.salgado@nemho.com</u>

Name of the organisation carrying out the underlying LCA study: Nemho Innovation B.V.

Modelling of electricity in module A3

The electricity consumed at the Wadersloh site for the Getacore® Worktop production comes 100% from the German grid. The grid was modelled using the ecoinvent process, *Electricity, medium voltage {DE}| market,* as a basis which the percentages of the different power sources have been adjusted according to the 2019 European Residual Mix published by AIB to prevent the double counting of green electricity. In the adjustment we assume that high-voltage electricity is only used, therefore the amount of solar energy (low voltage) still present in the residual mix is also taken out.

The modelled residual mix consists of 51% hard coal; 26% natural gas; 22% nuclear and 1% oil. The impact on climate change of 1 kWh is 0,684 kgCO_{2eq}.

The electricity mix used for the Getalit® HPL production, at Rheda-Wiedenbrück, in 2019 was declared as 67,02% from the grid, 32,02% from their CHP plant and 0,06% from LFO. For the electricity coming from the grid the same approach is followed as described above.

The CHP plant produced electricity and heat but only electricity was consumed for the production of the HPL, the heat was used in a different production process of a different product of the company that falls outside of the scope of the LCA study for Getacore® Worktops. The impact on climate change of 1kWh consumed for the HPL production is 0,695 kgCO_{2eq}.

Main assumptions adopted in the study

- Secondary data was taken from the database Ecoinvent v 3.8 and Carbon Minds. In the selection of secondary data, priority is given to more representative data in terms of temporal coverage, geographical coverage, and production technology.

- When the supplier of raw material is known, specific transport distances from the supplier to the factory are considered in the study, otherwise, transport is modelled according to average transport distances reflecting the market mix.

-The chipboard component was modelled using the ecoinvent dataset *Particleboard, uncoated {BE}|* particleboard production, uncoated, from virgin wood | Cut-off, U. This dataset has been aligned to the European emission class E1 in terms of formaldehyde content. The electricity, diesel and light fuel oil used in particleboard production have been also adapted to the European context.

- Manufacturing residues were modelled as hazardous waste transported on average 50km from the generation site to the final disposal facility by the company PreZero. An incineration process with heat and electricity generation was assumed for this stage.

-The Getacore[®] Smart 3mm top and Getacore[®] edge material used by the here declared product counts with its EPD[®] certification. The model used for such certification has been integrated into the calculations for the product subject of this EPD[®]. The Getacore[®] Smart EPD[®] certification was granted on April 8, 2021, under the registration number S-P-03470 and is valid until April 2, 2026.

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End-of-life scenario

The main markets for the Getacore[®] worktops are European countries, especially Germany and North Europe countries. Moreover, the Getacore[®] worktops have a significant calorific content due to their composition (see Tables 2 and 3). Since the waste-to-energy practice is a well-established technology in Europe, it is assumed that the Getacore[®] worktops would be used as secondary material for energy recovery. Thus, a 100% incineration end-of-life is modelled. Loads from material incineration are declared under module C3 and resulting energy credits are addressed in module D. In this way, the carbon uptake and release are accounted for in our product system. Energy credits are calculated considering the calorific value of 14.89 MJ/kg (19,7mm worktop) and 28,7mm worktop (15.33 MJ/kg) and the efficiency of the incineration is equal to 60%.



Modules declared, geographical scope, share of specific data (in GWP-GHG indicator) and data variation:

Stage		Product			Construction			Use End-of-life				Resource recovery					
Module	A1	A2	A3	A4	A5	B1	B2	B 3	B4	B5	B6	B7	C1	C2	C3	C4	D
Modules declared	Х	Х	Х	ND	ND	ND	ND	ND	ND	ND	ND	ND	Х	Х	Х	Х	Х
Geography	GLO	EU	EU	ND	ND	ND	ND	ND	ND	ND	ND	ND	EU	EU	EU	EU	EU
Specific data used			>90%			-	-	-	-	-	-	-	-	-	-	-	-
Variation - products	oducts Not relevant			-	-	-	-	-	-	-	-	-	-	-	-		
Variation - sites		Ν	lot releva	int		-	-	-	-	-	-	-	-	-	-	-	-

Table 1 Modules covered by the life cycle assessment

Module A1 = Raw material supply	Module B3 = Repair	Module C3 = Waste Processing
Module A2 = Transport	Module B4 = Replacement	Module C4 = Disposal
Module A3 = Manufacturing	Module B5 = Refurbishment	Module D = Reuse-Recovery-Recycling-potential
Module A4 = Transport	Module B6 = Operational energy use	ND = Module Not Declared
Module A5 = Construction installation	Module B7 = Operational water use	X = Module Declared
ModuleB1 = Use	Module C1 = Déconstruction démolition	GLO = Global
Module B2 = Maintenance	Module C2 = Transport	EU = European Union

Content information

Product components	Weight, kg	Post-consumer material, weight-%	Renewable material, weight-%		
Getacore® sheet material: Acrylic- bonded solid surface (3 mm)	4,94	0,00	0,00		
Getalit® HPL (0,7 mm)	0,99	0,00	60,00		
Getacore®edge (both sides)	0,44	0,00	0,00		
Substrate P2 (16 mm)	9,49	75,60	84,00		
Getacore® 2-component acrylic glue/joint adhesive	0,02	0,00	0,00		
PVAc adhesive	0,32	0,00	0,00		
TOTAL	16,19	44,29%	53,00%		
Packaging materials	Weight, kg	Weight-% (versus the product)			
NA*	NA	NA			

Table 2 Getacore® worktop composition per m² with a thickness of 19,7mm

* The Getacore Worktop 19,7mm has no additional packaging. The transport to customers is done using pallets.

Product components	Weight, kg	Post-consumer material, weight-%	Renewable material, weight-%		
Getacore® sheet material: Acrylic- bonded solid surface (3 mm)	4,94	0,00	0,00		
Getalit® HPL (0,7 mm)	0,99	0,00	60,00		
Getacore®edge (both sides)	0,68	0,00	0,00		
Substrate P2 (25 mm)	14,52	75,60	84,00		
Getacore®2-component acrylic glue/joint adhesive	0,02	0,00	0,00		
PVAc adhesive	0,32	0,00	0,00		
TOTAL	21,47	51,13%	60,00%		
Packaging materials	Weight, kg	Weight-% (versus the product)			
NA*	NA	NA			

Table 3 Getacore® worktop composition per m² with a thickness of 28,7mm

* The Getacore Worktop 28,7mm has no additional packaging. The transport to customers is done using pallets.

Dangerous substances from the candidate list of SVHC for Authorisation

Getacore[®] thin version worktops do not contain substances listed on the candidate list of Substances of Very High Concern, as published on the ECHA website, in concentrations exceeding 0.1 percentage by mass.



Environmental Information

Potential environmental impact – mandatory indicators according to EN 15804

Indicator	Unit	T _{A1-3}	C1	C2	C3	C4	D
			Getacore® Wor	ktop 19,7mm			
GWP-fossil	kg CO₂ eq.	3,91E+01	8,07E-01	1,33E-01	1,56E+01	0,00E+00	-1,27E+01
GWP-biogenic	kg CO₂ eq.	-1,67E+01	0,00E+00	0,00E+00	1,67E+01	0,00E+00	0,00E+00
GWP luluc	kg CO₂ eq.	1,97E-02	1,10E-03	5,28E-05	1,25E-04	0,00E+00	-1,31E-02
GWP total	kg CO₂ eq.	2,24E+01	8,08E-01	1,33E-01	3,23E+01	0,00E+00	-1,27E+01
ODP	kg CFC 11 eq.	5,50E-06	2,00E-08	3,11E-08	3,92E-08	0,00E+00	-1,04E-06
AP	mol H ⁺ eq.	2,05E-01	1,80E-03	6,76E-04	7,14E-03	0,00E+00	-3,67E-02
EP-freshwater	kg PO ₄ ³ eq.	3,11E-02	3,75E-03	2,66E-05	2,82E-04	0,00E+00	-1,67E-02
EP-freshwater	kg P eq.	1,01E-02	1,22E-03	8,67E-06	9,19E-05	0,00E+00	-5,45E-03
EP marine	kg N eq.	4,57E-02	5,83E-04	2,33E-04	4,17E-03	0,00E+00	-6,46E-03
EP-terrestrial	mol N eq.	4,08E-01	4,09E-03	2,54E-03	3,77E-02	0,00E+00	-5,91E-02
POCP	kg NMVOC eq.	1,34E-01	1,01E-03	7,26E-04	9,50E-03	0,00E+00	-1,93E-02
ADP-minerals&metals*	kg Sb eq.	7,53E-05	1,64E-06	4,68E-07	1,03E-06	0,00E+00	-2,14E-05
ADP-fossil*	MJ	6,66E+02	1,12E+01	2,03E+00	2,40E+00	0,00E+00	-2,23E+02
WDP	m ³ eq.	8,48E+00	3,03E-02	6,09E-03	8,34E-02	0,00E+00	-1,32E+00
			Getacore® Wor	ktop 28,7mm			
GWP-fossil	kg CO₂ eq.	5,19E+01	1,07E+00	1,77E-01	1,77E+01	0,00E+00	-1,75E+01
GWP-biogenic	kg CO₂ eq.	-2,22E+01	0,00E+00	0,00E+00	2,22E+01	0,00E+00	0,00E+00
GWP luluc	kg CO₂ eq.	2,61E-02	1,45E-03	7,01E-05	1,75E-04	0,00E+00	-1,80E-02
GWP total	kg CO₂ eq.	2,97E+01	1,07E+00	1,77E-01	3,99E+01	0,00E+00	-1,75E+01
ODP	kg CFC 11 eq.	7,29E-06	2,65E-08	4,13E-08	5,40E-08	0,00E+00	-1,43E-06
AP	mol H⁺ eq.	2,72E-01	2,39E-03	8,96E-04	9,42E-03	0,00E+00	-5,04E-02
EP-freshwater	kg PO₄ ³⁻ eq.	4,13E-02	4,97E-03	3,53E-05	4,04E-04	0,00E+00	-2,30E-02
EP-freshwater	kg P eq.	1,34E-02	1,62E-03	1,15E-05	1,31E-04	0,00E+00	-7,49E-03
EP marine	kg N eq.	6,06E-02	7,74E-04	3,09E-04	5,45E-03	0,00E+00	-8,87E-03
EP-terrestrial	mol N eq.	5,41E-01	5,42E-03	3,37E-03	4,96E-02	0,00E+00	-8,12E-02
POCP	kg NMVOC eq.	1,78E-01	1,34E-03	9,62E-04	1,25E-02	0,00E+00	-2,64E-02
ADP-minerals&metals*	kg Sb eq.	9,98E-05	2,18E-06	6,20E-07	1,41E-06	0,00E+00	-2,93E-05
ADP-fossil*	MJ	8,84E+02	1,48E+01	2,70E+00	3,24E+00	0,00E+00	-3,07E+02
WDP	m³ eq.	1,12E+01	4,01E-02	8,08E-03	1,14E-01	0,00E+00	-1,81E+00
Acronyms	Depletion potential of the end compartment; EP-	Varming Potential fossil fuels ne stratospheric ozone layer; A marine = Eutrophication poter of tropospheric ozone; ADP-n	AP = Acidification potential, ntial, fraction of nutrients re	Accumulated Exceedance eaching marine end comp	e; EP-freshwater = Eutrop artment; EP-terrestrial = E	phication potential, fraction Eutrophication potential, A	n of nutrients reachin .ccumulated Exceed

= Water (user) deprivation potential, deprivation-weighted water consumption

* Disclaimer: The results of this environmental impact indicator shall be used with care as the uncertainties of these results are high or as there is limited experience with the indicator

Potential environmental impact – additional mandatory and voluntary indicators

Results per functional or declared unit										
Indicator	Unit	T _{A1-3}	C1	C2	C3	C4	D			
Getacore® Worktop 19,7mm										
GWP-GHG ¹	kg CO ₂ eq.	3,83E+01	8,07E-01	1,32E-01	1,56E+01	0,00E+00	-1,24E+01			
GWP (ISO 21930)	kg CO2 eq.	3,80E+01	8,02E-01	1,32E-01	1,56E+01	0,00E+00	-1,23E+01			
ODP (ISO 21930)	kg CFC-11 eq.	5,75E-06	2,09E-08	3,28E-08	4,07E-08	0,00E+00	-1,09E-06			
EP (ISO 21930)	kg N eq	1,00E-01	9,14E-03	1,36E-04	1,47E-02	0,00E+00	-4,17E-02			
AP (ISO 21930)	kg SO2 eq	1,70E-01	1,50E-03	5,97E-04	6,49E-03	0,00E+00	-3,04E-02			
POCP (ISO 21930)	kg O₃ eq.	2,26E+00	2,02E-02	1,47E-02	2,04E-01	0,00E+00	-3,28E-01			
	Ge	tacore® Woi	rktop 28,7mm							
GWP-GHG ¹	kg CO2 eq.	5,08E+01	1,07E+00	1,75E-01	1,77E+01	0,00E+00	-1,71E+01			
GWP (ISO 21930)	kg CO2 eq.	5,03E+01	1,06E+00	1,75E-01	1,77E+01	0,00E+00	-1,68E+01			
ODP (ISO 21930)	kg CFC-11 eq.	7,63E-06	2,78E-08	4,35E-08	5,61E-08	0,00E+00	-1,50E-06			
EP (ISO 21930)	kg N eq	1,33E-01	1,21E-02	1,80E-04	1,91E-02	0,00E+00	-5,73E-02			
AP (ISO 21930)	kg SO2 eq	2,25E-01	1,99E-03	7,92E-04	8,56E-03	0,00E+00	-4,17E-02			
POCP (ISO 21930)	kg O₃ eq.	3,00E+00	2,68E-02	1,95E-02	2,68E-01	0,00E+00	-4,51E-01			
Additional voluntary indicators (from EN 15804	Additional voluntary indicators (from EN 15804 or the global indicators according to ISO 21930:2017)									

¹ The indicator includes all greenhouse gases included in GWP-total but excludes biogenic carbon dioxide uptake and emissions and biogenic carbon stored in the product. This indicator is thus almost equal to the GWP indicator originally defined in EN 15804:2012+A1:2013.



Use of resources

Indicator	Unit	T _{A1-3}	C1	C2	C3	C4	D
			Getacore®	Worktop 19,7mm	า		
PERE	MJ	5,97E+01	1,75E+00	2,87E-02	1,36E-01	0,00E+00	-2,00E+01
PERM	MJ	1,94E+02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	MJ	2,54E+02	1,75E+00	2,87E-02	1,36E-01	0,00E+00	-2,00E+01
PENRE	MJ	6,61E+02	1,12E+01	2,03E+00	2,41E+00	0,00E+00	-2,23E+02
PENRM	MJ.	5,28E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	MJ	6,66E+02	1,12E+01	2,03E+00	2,41E+00	0,00E+00	-2,23E+02
SM	kg	8,09E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	m³	2,57E-01	4,86E-03	2,27E-04	9,19E-03	0,00E+00	-9,69E-02
			Getacore®	Worktop 28,7mm	า		
PERE	MJ	8,05E+01	2,32E+00	3,80E-02	1,88E-01	0,00E+00	-2,75E+01
PERM	MJ	2,58E+02	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PERT	MJ	3,39E+02	2,32E+00	3,80E-02	1,88E-01	0,00E+00	-2,75E+01
PENRE	MJ	8,77E+02	1,48E+01	2,70E+00	3,24E+00	0,00E+00	-3,07E+02
PENRM	MJ	7,01E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
PENRT	MJ	8,84E+02	1,48E+01	2,70E+00	3,24E+00	0,00E+00	-3,07E+02
SM	kg	1,10E+01	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
RSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
NRSF	MJ	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00
FW	m³	3,42E-01	6,44E-03	3,01E-04	1,23E-02	0,00E+00	-1,33E-01

Acronyms

PERE = Use of renewable primary energy excluding renewable primary energy resources used as raw materials; PERM = Use of renewable primary energy resources used as raw materials; PERT = Total use of renewable primary energy resources; PENRE = Use of non-renewable primary energy excluding non-renewable primary energy resources used as raw materials; PENRM = Use of non-renewable primary energy resources; SM = Use of secondary material; RSF = Use of renewable secondary fuels; FW = Use of net fresh water



Waste production and output flows

Waste production

Results per functional or declared unit										
Indicator	Unit	T _{A1-3}	C1	C2	C3	C4	D			
Getacore® Worktop 19,7mm										
Hazardous waste disposed	kg	1,31E-01	8,02E-04	1,03E-04	7,69E-01	0,00E+00	-1,69E-02			
Non-hazardous waste disposed	kg	5,92E+00	4,91E-02	1,05E-01	3,30E-01	0,00E+00	-4,33E-01			
Radioactive waste disposed	kg	2,21E-03	4,68E-05	1,37E-05	6,78E-06	0,00E+00	-8,56E-04			
	Ge	tacore® Workto	op 28,7mm							
Hazardous waste disposed	kg	1,73E-01	1,06E-03	1,37E-04	1,12E+00	0,00E+00	-2,32E-02			
Non-hazardous waste disposed	kg	7,85E+00	6,51E-02	1,39E-01	4,66E-01	0,00E+00	-5,95E-01			
Radioactive waste disposed	kg	2,93E-03	6,21E-05	1,82E-05	9,37E-06	0,00E+00	-1,18E-03			

Output flows

Results per functional or declared unit										
Indicator	Unit	T _{A1-3}	C1	C2	C3	C4	D			
Getacore® Worktop 19,7mm										
Components for re-use	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00			
Material for recycling	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00			
Materials for energy recovery	kg	0,00E+00	0,00E+00	0,00E+00	1,62E+01	0,00E+00	0,00E+00			
Exported energy, electricity	MJ	0,00E+00	0,00E+00	0,00E+00	5,19E+01	0,00E+00	0,00E+00			
Exported energy, thermal	MJ	0,00E+00	0,00E+00	0,00E+00	1,05E+02	0,00E+00	0,00E+00			
		Getacore® Wor	ktop 28,7mm							
Components for re-use	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00			
Material for recycling	kg	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00	0,00E+00			
Materials for energy recovery	kg	0,00E+00	0,00E+00	0,00E+00	2,15E+01	0,00E+00	0,00E+00			
Exported energy, electricity	MJ	0,00E+00	0,00E+00	0,00E+00	9,13E+01	0,00E+00	0,00E+00			
Exported energy, thermal	MJ	0,00E+00	0,00E+00	0,00E+00	1,85E+02	0,00E+00	0,00E+00			

Information on the biogenic carbon content

Results per functional or declared unit							
BIOGENIC CARBON CONTENT	Unit	QUANTITY					
Biogenic carbon content in the 19mm product	kg C	4,94					
Biogenic carbon content in the 28mm product	kg C	6,56					
Biogenic carbon content in packaging	kg C	N.A.					

Note: 1 kg biogenic carbon is equivalent to 44/12 kg CO₂.

Additional information

Reducing the carbon footprint is a key part of our overall sustainability policy and it is based on our belief in doing the right thing. We are also convinced that reducing our overall environmental footprint is essential to the long-term success of our business and the environment around us. That is why sustainability is embedded in our business philosophy with the credo "do no harm, do good, do better".

At the core of our sustainability strategy is the principle that we should start with ourselves when we seek to improve the world: "do no harm". Our approach is straightforward; we measure our impact, select targets to reduce this impact, and monitor and report the progress. To measure our impact, we use the Life Cycle Assessment (LCA) methodology.

The second element of our strategy is to look for opportunities that support the environment beyond the direct scope of our manufacturing footprint: 'do good.' This includes creating highly durable products that have a long lifespan that limits the need for replacement. Additionally, we develop projects that absorb or reduce carbon emissions that are not directly linked to our factories or product portfolio.

We believe that addressing sustainability challenges will allow our company to continue to grow and 'do better' in the future. Investing in sustainability should – in the end – ensure that these efforts go beyond established regulatory requirements and that the net effect of our efforts will positively impact the environment in which we operate.

To learn more about our philosophy, approach and sustainability goals visit our website <u>https://www.westag.de/en/company/sustainability/</u> where also, our yearly position paper can be found

References

- 1. General Programme Instructions of the International EPD[®] System. Version 3.01.
- PCR 2019:14 Construction Products And Construction Services. Version 1.11. (EN 15804:2012 + A2:2019)
- 3. c-PCR-006 Wood and wood-based products for use in construction (EN 16485:2014)
- 4. ISO (2017a): ISO 14025:2006 Environmental labels and declarations.
- 5. ISO (2017b): ISO 21930:2017, Sustainability in buildings and civil engineering works -- Core rules for environmental product declarations of construction products and services
- 6. LCA background report for Getacore[®] Worktops in a thin version.

