

Quick Infos Clesana C1



Recommended retail price

Toilet system		Accessories		RRP EUR	
Clesana C1		inkl. Bedienpanel, inkl. Rund-Sockel oder L-Adapter		1.249,00 €	
					
Consumables	Packaging	Content	Other	RRP EUR	Price per piece
Barrier Foil Lner	Box	2 pcs. Lner	Cycle "SMALL" - up to 36 per Lner Cycle "BIG" - up to 26 per Lner	25,00 €	12,50 €
					
Absorber	Pouch	20 pcs. Absorber		3,50 €	0,18 €
					
Biobased Foil Lner			not yet available, in testing	n.n.	n.n.
Recycled Foil Lner			not yet available, in testing	n.n.	n.n.
Wear Parts	Packaging	Content	Other	RRP EUR	Price per piece
PTFE bands	Box	2 pcs. Bands	Lifetime 1.500 -2.000 cycles Can be replaced by oneself	30,00 €	15,00 €
					

Availability

Start of production	Start of series production and delivery to manufacturers, specialist dealers & workshops within spring 2022.
Sales channels	Clesana does not sell C1 directly to the end customer. Sales to end customers are made via manufacturers, wholesalers and specialist retailers. Clesana does not sell C1 directly to the end customer. Before the start of production, we will inform you who will have the Clesana C1 in their portfolio and where it can be purchased.
Installation/ Retrofitting	Clesana will not carry out any retrofitting of the C1 in vehicles. Unfortunately, we do not have the premises for this. However, the conversion can be carried out by any specialist workshop or on your own (assuming specialist knowledge and tools). The technical product and performance data can be found in the "Info-Area" section of the Clesana website. Info-Area Clesana website: https://clesana.com/en/info-area/ There will be conversion videos to follow which will be publicly posted on YouTube and our website and will act as a guide to the retrofit. A list of tools and materials needed for the conversion will also be available in the "Info-Area" section. We are in discussion with manufacturers, dealers & workshops and will provide information before the start of series production.
Providing information	All information on purchase and installation/conversion is sent by e-mail to everybody that entered their names in the "Waiting List". In addition, the information is made available on the website. Waiting list Clesana website: https://clesana.com/en/waiting-list/
For Business customers	If interested in distribution and/or the implementation of C1 retrofits, Clesana can be contacted directly. Contact for business customers: https://clesana.com/en/contact/ Dealers & manufacturers who are only interested in small quantities in advance for small series or for test purposes can obtain these via the wholesale trade. The desired order quantity can be pre-registered with the wholesaler for fast delivery.

Product specification

Technical data		Power Data	
Dimensions L-Adapter (H x B x T)	515 x 363 x 516	Nominal voltage	12 V
Dimensions round socket (H x B x T)	515 x 363 x 461	Supply voltage	10 - 15 V
Sitting height	478 mm	Power input (max.) (12 V)	27 A
Outer dimensions display (H x B x T)	85 x 128 x 38	Power consumption in standby mode	0,14 W
Gross weight	14 kg	Power consumption (max.)	324 W
Load capacity (corpus & lid)	150 kg	Energy consumption welding process	0,64 Wh
Toilet usage BIG per liner	up to 26	Energy consumption separation process	0,99 Wh
Toilet usage SMALL per liner	up to 36	Recommendation diameter power cable	<8 m: 10 mm ² >8 m: 16 mm ²
Technical drawings	Detailed drawings of C1, display, base and adapter for download:		https://clesana.com/en/info-area/

Environmental footprint

The comparative environmental footprint is available for inspection and download..

The subject of the study is the comparison of barrier foil with a "green" sanitary additive. Time of observation from production to disposal

The comparison was carried out according to the ReCiPe method and looks at the holistic impact based on the various impact factors

Greenhouse effect (CO₂ footprint), acidification of soils, ecotoxicity in water bodies, toxicity for humans and saving of resources

The environmental footprint is available in the "Info-Area" section of the Clesana website

<https://clesana.com/en/info-area/>

The results of the study can also be viewed in edited form in the product brochure (p. 14-17) and in the data sheet (p. 7).

FAQ

We already have a FAQ section on our website where we answer the most frequently asked questions.

We will continuously expand this section with new questions and the answers to them.

The most frequently asked questions are listed below and answered on the website:

<https://clesana.com/en/our-faq/>

- > Can I discard sanitary bags as compost waste (organic waste)?
- > Can I discard the sanitary bags as household waste?
- > Are the sanitary bags odour-proof?
- > Is the toilet fully operational immediately after use?
- > Is the welding functionality suitable for toilet waste?
- > Does the toilet operate exclusively under 12 volt?
- > Do I have to equip the sanitary bag compartment with an additional waste bag?
- > What is the maximum load capacity of the toilet?

In addition, some questions that were increasingly asked during and after the fair are answered below:

- > **Can toilets other than the Thetford C260 be converted?**

Yes, in general all makes and types can be converted. The installation situation in each case determines the complexity and the effort required for the conversion. The C260 from Thetford can be easily converted using an L-adapter due to its identical layout. In general, however, the round base can also be used for placing the C1. The service opening must then be closed separately. The right contact point for planning the conversion is your trusted specialist workshop. With the help of the technical drawings on the Clesana website in the "Media" section, the conversion can be planned in the best possible way and the effort required can be estimated. We are currently in talks with specialist workshops for possible modifications to shower trays and will also announce these contacts before the SOP before the start of series production. This is particularly interesting for bench toilets and all makes that are recessed into the shower tray at floor level.
- > **Can the toilet also be operated with 220/230V mains voltage?**

A validated power supply unit is required for this type of operation. Currently, we have not validated a power supply unit for long-term operation with 220/230V mains voltage and do not plan to do so.
- > **Can the toilet also be powered by a battery?**

Power supply via an external, mobile battery is possible. The operation can be carried out taking into account the performance data of the C1. Since the C1 is a system that is to be permanently installed, we have not provided a battery version for it. The possibility of a mobile, portable version of the C1 with an integrated battery is being examined.
- > **Can the toilet be used flexibly?**

The C1 was designed to be fixed firmly to the floor. Other types of fixing have an influence on the stability and, depending on the type of installation, also on the function of the toilet.
- > **What is the service life of the toilet?**

All visible parts are made of ABS, all load-bearing and power-transmitting components are made of glass-fibre reinforced plastic. When developing the welding unit, we relied on commercially available components that have already been tested many times on the market. Accordingly, the service life of both the plastic components and the welding unit corresponds to the current state of the art. Only the Teflon belts are wearing parts. Their coating starts to degrade after approx. 1,500 cycles. We currently have C1 toilets on the test bench that have completed over 22,000 cycles without mechanical defects in the welding unit.
- > **Do I have to seal ("flush") after every use of the toilet?**

The most hygienically safe way to use the C1 is to seal the contents after each use of the toilet. It is perfectly possible to go to the toilet several times: toilet several times without triggering the sealing. However, one has to pay attention to the maximum filling level of the bags (toilet paper should not protrude). Too much content can also pull the bag down due to its own weight. This should be avoided if possible. Foil that is pulled downwards cannot be detected by the system and can therefore lead to an incorrect display of remaining cycles.
- > **Is the absorber necessary for going to the toilet?**

No. The absorber has no effect on the function of the toilet. It only binds liquid to a semolina-like consistency. This can be used to make the bags more comfortable to use or to provide additional safety to prevent leakage if the bags are damaged. Likewise, the absorber can make going to the toilet more pleasant when there is repeated small business in the same bag (e.g. at night).
- > **Why is the film used not biodegradable?**

According to the EU directive on biodegradable plastics (EN 13432), the following conditions are necessary for the declaration "biodegradable/compostable"

 - *Biodegradability in aqueous media: 90% of the organic material must be converted into CO₂ in 6 months.*
 - *Composting: After 12 weeks of composting, no more than 10 % residues in relation to the original mass in a 2 mm sieve.*

Only industrial compostability is required. The plastic therefore only degrades so quickly in an industrial environment (temperature/pressure). Through self-composting, even products described as 100% compostable are not necessarily completely degraded. This is why a large proportion of bio-based/compostable bags must not be disposed of in organic waste. Here, too, they must be disposed of in the residual waste. This is the only way to ensure that the part that does not degrade or only degrades very slowly does not degrade into microplastic and end up in the environment. Another reason why we do not use biodegradable polymers is that this limits the barrier function of the film. Without a barrier, contents and parts of the film end up proportionally in the environment before proper disposal. Our philosophy is to reduce the CO₂ footprint while at the same time avoiding environmental hazards (microplastics, hormone/medicine/etc. contaminated hormones/ medicines/ etc., chemicals). That is why we rely on the use of CO₂-neutral materials. That means bio-based film. With our standard film, the CO₂ footprint is already smaller than with chemical toilets and we also reduce the generation of CO₂ elsewhere (e.g. through journeys or detours to the disposal station). By using CO₂-neutral materials, we are reducing this even further. We are currently testing bio-based film with 60% biomass content. We are also testing film that is made of recycled material. Whether **biobased** or **biodegradable**, it is important to protect the environment in both cases by disposing of it properly in the non-recyclable waste. See also: "Can the bags be put on the compost (organic waste)?" in the FAQs on the Clesana website.