# Frequently asked questions

Here you will find short and clear answers to frequently asked questions.

# **Functionality & separation system**

#### How do I use a TROBOLO®?

Using a TROBOLO® differs little from using a conventional toilet. The sitting position is identical to that of a regular toilet – this applies to both men and women. Thanks to the contact-free separation system the body only touches the toilet seat. Merely urinating while standing should be avoided as the urine cannot be fully separated in this case.

#### How does a TROBOLO® work?

The main difference between a TROBOLO® urine-diverting toilet and a regular toilet is the lack of a water flush. As a result, a TROBOLO® doesn't require any connection to the sewage system. The integrated separation system separates the urine from the solid faeces and thereby prevents the mixing of excretions.

# How does the separation system work?

The separation is made possible by an integrated separator made of durable plastic. This separator in the front part of the toilet opening directs the urine into the inner container for liquids. The solid faeces and toilet paper end up in the container for solids via the rear of the toilet opening. The separation system is adapted to the human anatomy so that any physical contact is avoided.

# What is the function of the separation system?

By separating the excretions, odours are reduced to a minimum and the subsequent disposal of toilet waste is made easier. Unpleasant odours arise only when urine and faeces are combined which is why it is possible to do without toilet chemicals that are harmful to the environment.

# **Exhaust system & litter**

#### Are odours generated during usage?

Since unpleasant odours only develop when faeces come into contact with urine, the TROBOLO® separation system prevents a mixing of the excretions. Remaining odours and any arising moisture are also absorbed by litter which is not required in a TROBOLO® with an electric exhaust system.

# How does the electrical exhaust system work?

By simply plugging the plug into a socket, a very efficient fan is operated which permanently generates a slight vacuum and thereby directs moisture and remaining odours outside via an exhaust duct. The system works almost noiselessly and requires only 2 watts of power which equates to an annual power consumption of less than 6 euros at a continuous use of the TROBOLO®. The additional use of litter is not required.

#### How does the natural exhaust system function?

The natural exhaust system which is used in the TROBOLO® KersaBœm makes use of the chimney effect. Due to this natural effect the warm air rises and is extracted outwards via an exhaust duct. That way, moisture and remaining odours are led out of the toilet and as a consequence unpleasant odours are neutralized. No electrical energy is needed for this.

#### What is litter?

Litter consists of compostable and absorbent materials such as wood shavings. With the help of a small container, approximately 250ml of litter is placed in the back of the toilet opening after every defecation, where it covers the faeces and the used toilet paper and absorbs moisture and any remaining odours. The litter is only necessary with TROBOLO® urine-diverting toilets that do not have an electrical exhaust system.

# Can sawdust or wood chips produced at home be used in place of the litter?

If you happen to have wood waste products like sawdust at home due to DIY projects, you can simply use these as an alternative to the litter or add them to your existing TROBOLO® litter. You should only make sure that the sawdust is neither too fine nor too coarse. For this, you can use the consistency of our TROBOLO® litter as a guide.

# **Toilet paper**

#### How do I dispose of the toilet paper?

Dispose of used toilet paper as usual by placing it in the rear part of the toilet opening where it covers the solid excretions and is later composted to humus or disposed of.

#### Do I need special toilet paper?

The use of special toilet paper is not required. Since toilet paper is made of pulp, it is biodegradable and can be composted together with the other toilet waste.

# **Emptying**

# How often do I need to empty my TROBOLO®?

The length of the intervals between emptying varies among the different TROBOLO® models and you can read up on these in the features section under 'Capacity'.

# How do I empty my TROBOLO®?

All TROBOLO® models can be conveniently opened from above to remove the two separate containers located inside. After opening the TROBOLO®, the inside containers are sealed tightly with the help of the closures through a simple pressing or screw mechanism, which renders them air- and liquid-tight. The final step is to remove the containers which can then be transported to the emptying location.

#### How do I dispose of the toilet waste?

The TROBOLO® separation system allows for a decentralised disposal of toilet waste on your own property. The urine can be diluted with water to be used as organic fertiliser in the garden. The solids container can be emptied in a composter where the contents are composted correctly together with the biodegradable inlay and other garden waste. If the requirements for proper composting aren't given, it is possible to dispose of the toilet waste via your regular household waste, just like you would do with used nappies, and you can empty the liquids container via a toilet that is connected to the sewage system.

# **Composting**

# Do I need a special composter?

For the correct composting of toilet waste, it is recommended to use a closed composter. This prevents unpleasant odours during the composting process and the intrusion of excessive rainwater, which turns into black water when it comes into contact with not yet composted material and should not seep away into the ground. Commercially available hot composters usually fulfil these requirements. You can also find composters specially designed for this purpose in our online shop.

# What can I use the composted toilet waste for?

During the composting of toilet waste, these quickly lose their volume and can no longer be recognised as such within a few weeks. To make sure that all substances that might possibly be unhygienic are eliminated, a composting period over 24 months is recommended. The finished humus can be used in your garden as organic fertiliser for ornamental flowerbeds.

# **Hygiene & cleaning**

# Is the usage of a TROBOLO® hygienic?

Yes. A TROBOLO® is designed so that the user only comes into contact with the toilet seat, just like with a conventional toilet

The containers are air- and liquid-tight, so a spillage is not possible and they can be carried over long distances without any issues. Since the excretions only come into contact with plastic surfaces, the cleaning is also hygienic.

# How do I clean my TROBOLO®?

This type of toilet requires less cleaning than a conventional toilet since the solid excretions (even if the user suffers from diarrhoea) go directly into the solids container which is protected from soiling by a replaceable inlay. The wooden surfaces are proofed with a natural oil and can be cleaned with a damp cloth, just like the toilet seat which is sealed by an antibacterial protective coating.

#### Do I have to clean the containers?

The solids container is equipped with an inlay after every emptying which is placed into the container like a pouch and protects it from soiling.

If required, the liquids container can be rinsed out with a little water and cleaning agent and requires no elaborate cleaning beyond this.

# Legal regulations

# Where am I allowed to use a TROBOLO®?

Due to the municipal decision-making authorities, there is no extensive uniform regulation. Regionally, chemical toilets or classic 'outhouses' are often prohibited; urine-diverting toilets like our TROBOLO® are generally permitted.

#### What are the wastewater directives?

Even if every municipality has its own regulations regarding the lawful water procedures, you can happily ignore these guidelines, because our TROBOLO® urine-diverting toilets do not produce leachate or black water, both of which can lead to pollution of the groundwater.

### Am I allowed to use a TROBOLO® in an allotment?

Many of our customers already use our TROBOLO® in their allotment garden, without this circumstance leading to any conflicts. To be on the safe side, you can ask your gardening association which controls the disposal of faeces and sewage in its garden regulations and and which can give you more information about this.

# Do I need a building permit for the TROBOLO® outdoor models?

A building permit is generally not necessary and has not yet been required by any of our customers. You can acquire binding information and a confirmation from your local planning authority.

# **Further information**

# Why isn't the container for liquids larger?

The volume of 10 litres offers the best compromise between capacity, space requirement and handling. At first glance, it may certainly seem more convenient to use a much larger container, but practice has shown that this only constitutes a shift, not a solution. The TROBOLO® wouldn't have enough space to accommodate a larger container which would require a complex exterior installation and in addition to this, the container would still have to be emptied which would pose a challenge due to the greater weight.

# Where can I set up a TROBOLO®?

Technically, anywhere. Depending on the place of installation, there are different TROBOLO® models for indoor and outdoor use. Most TROBOLO® models work completely self-sufficient and offer high comfort even in very remote locations.

# Do I need a power connection for my TROBOLO®?

Apart from the TROBOLO® models with electric exhaust system, you can use your TROBOLO® autonomously and without electricity supply at any location.

# Do ongoing expenses arise by using a TROBOLO®?

The ongoing expenses are limited exclusively to the use of inlays and litter. The latter is not needed for TROBOLO® models with an electric exhaust system. Instead, electricity costs arise which amount to less than 6 euros per year.

# Do I have to look at faeces when opening the TROBOLO®?

No. Thanks to the black solids container, the incidence of light is minimal and as the toilet paper always gets added last, there is no direct view of the faeces. Thus, the view is limited to the toilet paper and if you're using litter, which would be added after the toilet paper, you'd only be seeing this.

# Does it matter if the urine isn't completely separated?

The design of the TROBOLO® system ensures that nothing can be spilt and that it still works if the urine is not separated entirely. If the urine isn't diverted correctly by the separator, it simply flows into the solids container where, in small quantities, it causes no disadvantage.

# Do I have to consider anything in relation to menstruation and using a TROBOLO®?

Using a TROBOLO® during your menstrual period is not an issue at all. Menstruation-related stains on the surfaces can be cleaned wet, just as any other stains. Regarding disposal / composting the amounts of blood caused by menstruation are negligible. Pads and similar objects shouldn't be thrown in the containers, if you are planning to compost.

# How does frost affect the TROBOLO® KersaBæm and the containers?

The TROBOLO® system is designed for year-round usage. It doesn't require any tubes or other mechanical parts that could be affected by frost. We recommend simply painting the exterior with a wood protecting paint to counteract any changes in the wood caused by weather conditions. During the production of the necessary accessories, such as the containers, we also take into account that these have to withstand winter temperatures. Urine does not freeze until well below the freezing point, but we nevertheless recommend a more frequent emptying of the containers at temperatures below zero.

# Can a TROBOLO® be disassembled for mobile usage?

For interior areas, we have developed a separate toilet in addition to our complete systems which comes to your home as a pre-assembled kit. The TROBOLO® TeraBloem is ideally suited for mobile usage, for example in a motorhome or in smaller campervans, and can be easily assembled without any additional tools.

# For how long can I use compostable inlays before they dissolve?

The advantage of our inlays being compostable is their composition of degradable cornstarch. However, this inevitably results in less durability which is why we recommend a weekly change of the inlay.

# What material is the separator of the TROBOLO® urine-diverting toilets made of?

The separator is handcrafted out of fibre-reinforced plastic.

# Does TROBOLO® offer solutions for an increased number of uses with containers that have a larger volume, such as at events, for example?

Experience has shown that a larger container would involve major disadvantages when it comes to its emptying. However, with our TROBOLO® KersaBœm, it is possible to place additional interchangeable containers into the interior of the separating toilet in addition to the two solids and liquids containers that are already included in the scope of delivery. This way, either four further liquids containers or an additional solids and two extra liquids containers could then be provided. The compartment that would normally contain the litter could then be used as a storage space for these.

#### How robust is the roof of the TROBOLO® KersaBoem for exterior areas?

The roof of the TROBOLO® KersaBæm is a natural daylight roof made of polycarbonate. It consists of 6mm thick double-skin sheets which are weather-, hail- and scratch-resistant.

# Is there a visual protection that prevents the view of faeces?

We consciously avoid the installation of a visual protection in our urine-diverting toilets as this is a mechanical component that could possibly lead to faults and additional cleaning which we don't want to burden our customers with.

For instance, a visual protection screen doesn't function in an unobstructed way as soon as someone using the toilet sits down on it with their full body weight – which would be the prerequisite for the complete opening of the screen, and which would then inevitably lead to the soiling thereof.

What's more, the last step in the use of our urine-diverting toilets with an electric exhaust system is the addition of used toilet paper. Thus, if you look directly into the opening, you will see precisely this (the toilet paper) and not the faeces of the previous

When using our urine-diverting toilets without an electric exhaust system, litter is also added to the used toilet paper. In this case, when looking into the opening, only the litter and possibly some toilet paper are visible as opposed to your own excretions or that of other users.

Should you have any remaining concerns about aesthetics, then adding more litter may solve this. However, we expect that this is not necessary.