

# Operating manual

## Compost tea brewer

### EdaLife V15

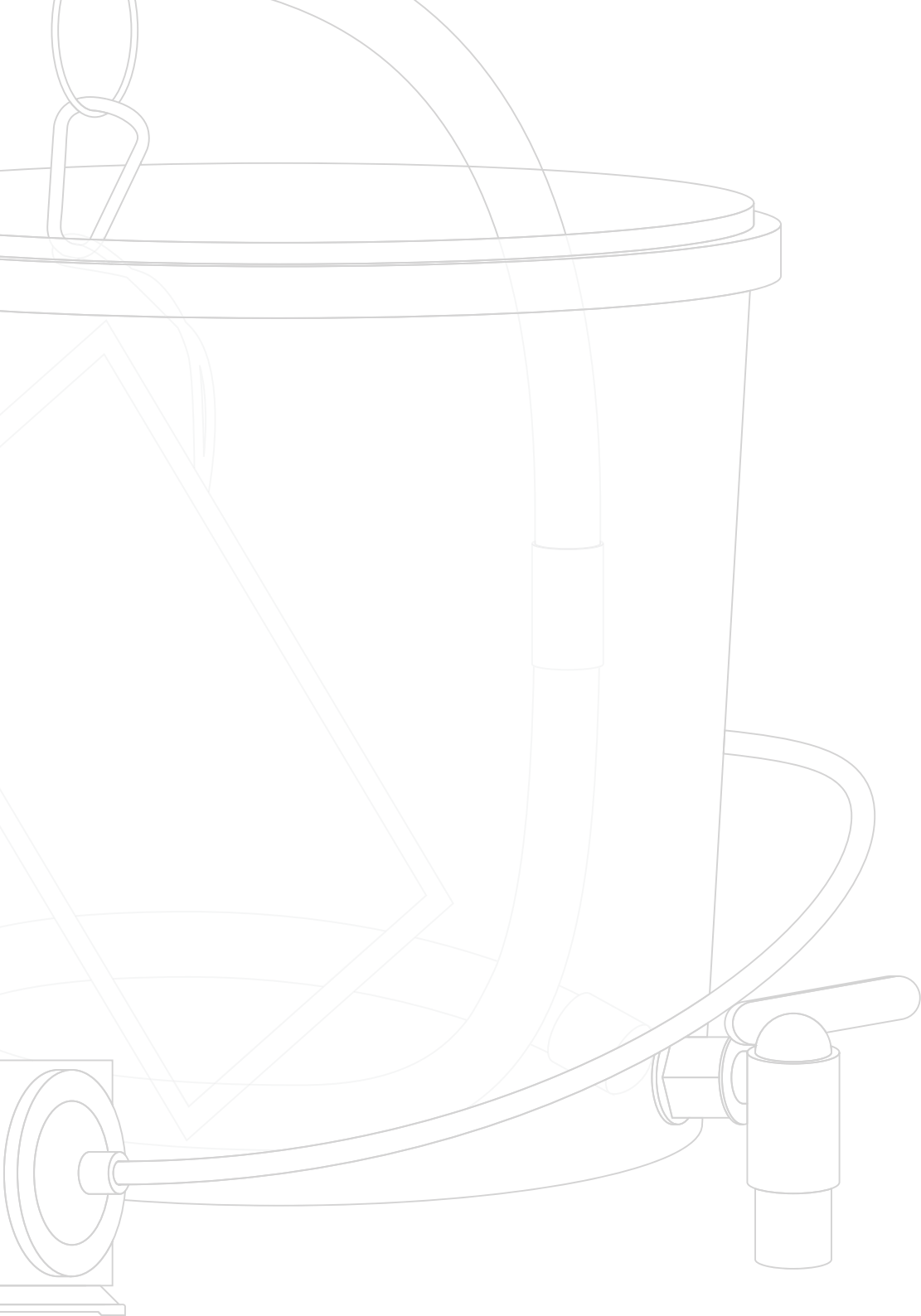


We are pleased that you have chosen the **EDAPRO** compost tea brewer. Your new brewing system is a quality product for the production of high quality compost tea. **EDAPRO** Compost Tea is an actively aerated compost tea of the highest quality with beneficial, plant-supporting microorganisms.

Read these operating instructions carefully before carefully before putting the brewing system into operation.

**ATTENTION:** The brewer should only be used, maintained used, maintained and repaired only by persons who are familiar with the operating instructions.





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# EDAPRO product range

<i>name</i>	<i>product</i>	<i>description</i>
Brewing system	<i>EdaLife</i>	Machine for the production of microbiologically active plant fortifiers (compost tea)
Microbial substrate	<i>EdaBíom</i>	Specially inoculated compost according to controlled microbial composting (CMC)
Microbial food	<i>EdaBíom+</i>	Food for the multiplication of microorganisms during the brewing process
Compost tea		Microbiologically active plant fortifier produced with the <b>EDAPRO</b> brewing system

# General

**EDAPRO** GmbH is constantly working on the further development of the brewing systems; we reserve the right to make changes to the scope of delivery in terms of form, technology and equipment. Therefore, no claims can be derived from the information and illustrations in these operating instructions.

## Manufacturer

EDAPRO GmbH  
Halterhus 1  
6017 Ruswil

info@edapro.ch  
www.edapro.ch

## Intended use

The compost tea brewer **EdaLife V15** is exclusively suitable for the production of EDAPRO compost tea according to the instructions of EDAPRO GmbH. The quality of the compost tea can only be guaranteed with the use of the microbial substrate (EdaBiom) and the microbial food (EdaBiom+) in the quantities adapted to the brewing system. To ensure effectiveness, all parameters must be observed before, during and after the brewing process.

## Description

The compost tea brewer **EdaLife V15** is designed to produce high quality, actively aerated compost tea. The „motor“ of the brewer is an air pump which continuously pumps air into the lower area of the riser pipes. Due to the ingenious design, an optimal circulation of the water body is achieved. The mixture of water, microbial substrate (EdaBiom) and microbial food (EdaBiom+) is lifted by the riser tubes and gently returned to the tank. The resulting vortex guarantees gentle mixing and creates an optimal environment for the efficient multiplication of beneficial microorganisms. During the 24 - 48 hour brewing process, the microorganisms are multiplied exponentially.

## Scope of delivery

- Bucket with a drain cock
- Air pump
- Air hose
- Filter bag with carabiner
- Aeration element (two-part)
- measuring cup
- Microbial substrate (2.5 Liter)
- Microbial food (0.5 Liter)
- Operating manual

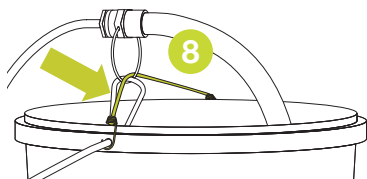
## Technical data

Product	<i>EdaLife V15</i>
Volume (l)	15
<b>Voltage (V)</b>	220
Frequency (Hz)	50
Power input (W)	25
Operating pressure (bar)	0.15
Air flow rate at operating pressure (l/min)	45
Diameter (mm)	330
Height (mm)	320
Weight (g, including air pump)	1890

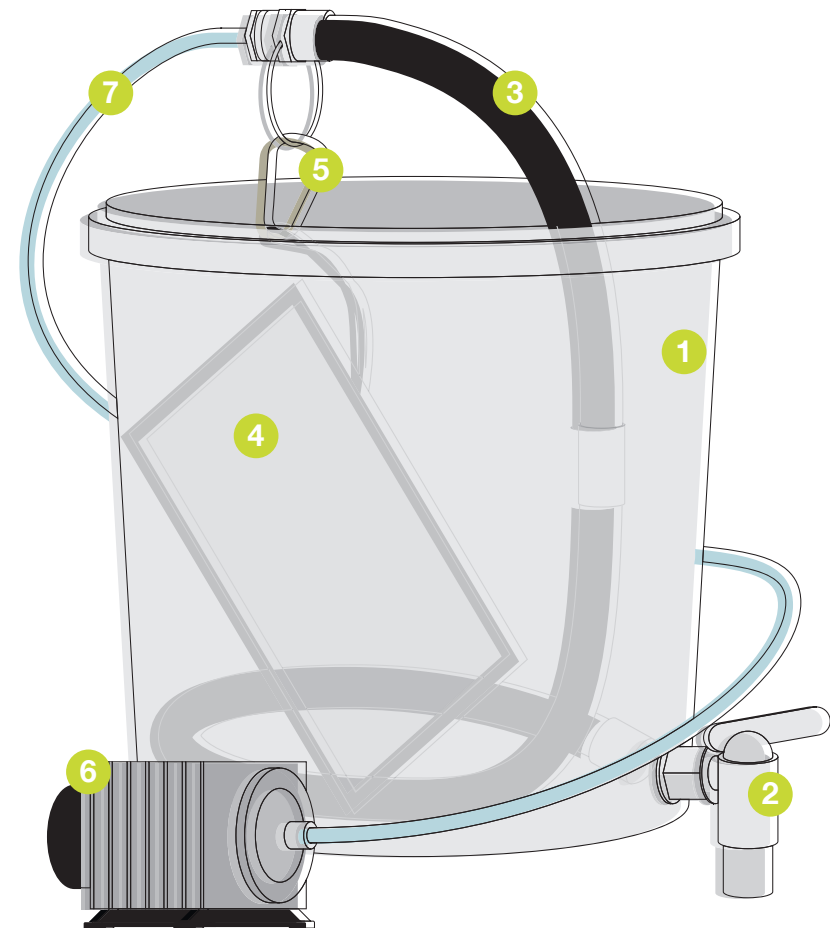
# Brewing system components

## Key components of the compost tea brewer

- 1 Bucket
- 2 Drain cock
- 3 Aeration element (assembled)
- 4 Filter bag
- 5 Carabiner
- 6 Air pump
- 7 Air hose
- 8 Tension rubber



We have now added a rubber strap to our shower system so that the ventilation hose always stays in place.



# Difference between soil and foliar application

The **EDAPRO** compost tea can be used in many ways due to its high diversity of beneficial microorganisms. Depending on the application, one speaks of soil or foliar application.

*If you have any questions about the use of compost tea, contact us!*

## Soil application

For an area-wide distribution of the compost tea, dilution with water is possible. The degree of dilution depends on both the application quantity recommended by **EDAPRO** and the application technique. This is usually in the range of 1:3 - 1:10. With irrigation systems, even a dilution of 1:50 can be achieved. If the compost tea is diluted, it is recommended to apply compost tea more often. We will be happy to advise you on dilution and application intervals according to your personal situation.

With regard to dilution and application intervals, however, there are no fixed rules and it always depends on your personal starting position. For example, poorly humic, sandy soils or substrates with a high permeability require more applications with compost tea than heavy, clayey soils or substrates with a low permeability.

## Foliar application

A foliar coverage of 75% should be aimed for. The compost tea should not be diluted more than 1:3 with water when applying the leaves. Our microbial substrate (EdaBiom) is free from any human pathogens. This is ensured by repeated checks by **EDAPRO**.



# Brewing Process - Safety Instructions



## Starting up the brewer

- Put the ventilation element together.
- Connect the air pump to the air hose.
- Connect the air hose to the aeration element.
- Set up the brewer on a level, firm and free work surface.
- Set up the brewer in the shade, ideally at room temperature (22 °C). Direct sunlight should be avoided.
- Place the air pump in a place protected from splash water.
- Protect plug connections from splash water.
- Always operate the brewer in a clean state.

# Application rates compost tea

## Application rates per brewing process

The following table gives an overview of the required quantities of microbial substrate and microbial food per application.

Brewer (L Volume)	Microbial substrate (liters)	Microbial food (liters)
<b>EdaLife V15</b>	0.5	0.1

## Application quantities

The application rate depends heavily on the condition of the plant or the soil. Generally speaking, higher application rates improve the effectiveness. The following information serves as a guide:

**Garden:** 0.5 liters per square meter.

**Potted plants:** Replace the watering water with compost tea. You can also dilute the compost tea with water up to a ratio of 1: 5.

**Tip:** Compost tea is also ideal for foliar application.

# Brewing process - EDAPRO Compost Tea

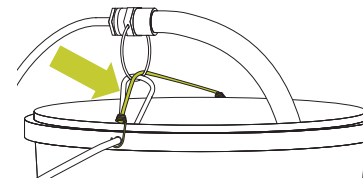
1. Check that the drain cock on the bucket is closed.
2. Fill the bucket with 15 liters of lukewarm (18-25 ° C) water.

*If the used water has been mixed with chlorine, the brewer must be put into operation 30 minutes before it is filled with the microbial substrate so that the chlorine, which is harmful to the microbes, can evaporate.*

*If the compost tea is intended for foliar application, we recommend soft water with a water hardness below 7 ° fH. The bicarbonates bind the nutrients and cannot be absorbed by the leaf. Rainwater or water from an osmosis system is best.*

3. Put 500 ml microbial substrate with the measuring cup (2 fillings) in the filter bag.
4. Roll up the filter bag several times (up to the rope with snap hook) and close the buckle.
5. Attach the carabiner of the filled filter bag to the ring of the aeration element.
6. Place the aeration element with the filter bag in the bucket filled with water.

7. Wrap the elastic around the ring of the ventilation hose and hang both ends on the handle of the bucket.



8. Start the air pump (plug it in).
9. Add 100 ml of microbial food to the water using the measuring cup (up to the mark).
10. The brewing process is completed after 24 - 48 hours. The optimal temperature during the brewing process is 20 - 22 °C.
11. Turn off the air pump.
12. Open the drain cock and fill the compost tea (for example in a watering can). It is best to apply immediately. Without aeration, the compost tea can be kept for a maximum of 4 hours.

*Since the nutrients are bound in the bacteria, there is no danger of giving too much compost tea. The plants cannot be harmed. The same applies to leaf application.*

# Application - Factors to consider

## Weather / time of application

Direct sunlight (UV light) should be avoided during the entire brewing process as well as during application, as the microorganisms can be damaged. The application should ideally take place in the evening or under overcast skies. Do not apply foliar sprays if rain is forecast within 24 hours. It is best to apply after heavy rainfall.

Do **not** apply under the following conditions:

- When it rains or there is a lot of dew on the leaf
- On very hot days (temperature over 30 ° C)
- In strong winds

## Application by backpack sprayer

If the compost tea is applied with a backpack sprayer, the following points must be observed:

- With the backpack sprayer, make sure that the sieve and nozzles are not smaller than 0.4 mm. With a smaller sieve size, useful microorganisms from the **EDAPRO** compost tea do not get onto the leaves and soil.
- The optimal working pressure of the backpack sprayer is a maximum of 2 bar. A higher working pressure kills sensitive microorganisms.
- If pesticides were applied with the same knapsack sprayer, the knapsack sprayer with **EDAPRO** Compost Tea must be washed out thoroughly with water before use.

# Cleaning the brewer

Cleaning must be carried out immediately after each brewing process. Thorough cleaning is important, as otherwise deposits (biofilms) can arise, which impair the quality of the compost tea. The brewer is designed in such a way that the cleaning effort is as low as possible.

1. Remove and empty the filter bag.

*Tip: The microbial substrate is ideal as an addition to your plants! It is best to spread it on the surface of the bed or the pot and work it into the soil.*

2. Take the aeration element apart and rinse it thoroughly with water.
3. Rinse the container and filter bag.

*Tipp: Den Filterbeutel kannst du auch zum Abwischen von Ablagerungen am Belüftungselement und am Behälter verwenden. Wichtig ist, dass er nach dem Gebrauch wieder sauber ist.*

# Storage advice

## Storage of microbial substrate

Keep the microbial substrate in a cool and shady place. The microbial substrate must not dry out and may need to be moistened so that the microorganisms are not damaged or become inactive. A moisture content of 55-65% is ideal. A cellar is an ideal storage location.

**Shelf life: 3 months**

## Storage of microbial food

A dry place with low temperature fluctuations is suitable for storing the microbe food. Make sure the container is tightly closed and that no moisture gets on the food.

**Shelf life: 12 months**

# FAQ - frequently asked Questions

*Is it possible to overdose with compost tea?*

Negative effects of overdosing have not been observed so far. Since the nutrients are bound in the bacteria, there is no danger of administering too much compost tea.

*Up to what temperature can I apply compost tea?*

⇒ compost tea can be applied up to a soil temperature of C. At a lower temperature the microorganisms are inactive.

*Can EDAPRO compost tea be mixed with liquid fertiliser?*

Liquid fertilisers can be added to the **EDAPRO** compost tea. Under certain circumstances, however, negative interactions between fertiliser salts and microorganisms may occur. A recommendation can therefore only be given with reservations.

*Why is the EDAPRO compost tea only have a shelf life of 4 hours?*

The beneficial microorganisms in the compost tea need oxygen. During the production process, the organisms are strongly multiplied. As soon as aeration is stopped, the oxygen contained in the solution is quickly used up. If the oxygen content falls below a certain range (<5 mg/L), anaerobic organisms establish themselves, which can harm the plant. Due to the high oxygen demand, the compost tea must be used immediately after the brewing process and can be kept for up to a maximum of 4 hours.

*Can I use any microbial substrate for use for making compost tea?*

**EDAPRO** compost tea only contains the microorganisms that were present in the microbial substrate (EdaBiom) at the beginning. Due to this fact, the plant-strengthening effect of the compost tea can only be guaranteed with the microbial substrate EdaBiom from **EDAPRO**.

## Replaces EDAPRO Compost Tea fertiliser?

No. Although **EDAPRO** compost tea does contain nutrients, these are negligible in the nutrient balance.

An essential component of compost tea are the useful microorganisms that stimulate metabolic processes and make nutrients contained in the soil or substrate available to plants (mineralise). If there is a nutrient deficit, fertiliser must be applied. Compost tea, on the other hand, does have a foliar fertilising effect.

## Does the use of EDAPRO compost tea exclude the use of chemical pesticides?

No. High disease pressure must be treated acutely and curatively. After the use of chemical pesticides, the application of compost tea makes sense. **EDAPRO** Compost Tea works preventively by strengthening the plants and their natural defences. In this way, the cause of the disease is treated to prevent its symptoms.

## What is the difference between EDAPRO products and products with effective microorganisms (EM)?

The term „effective microorganisms“ (EM) was trademarked by Teruo Higa in 1970. EM is a mixture of about 80 different species of microorganisms that are cultivated in the laboratory. The microorganisms from EM prefer a low-oxygen environment. In contrast, compost tea has an average of 500,000 different useful microorganism species. Because of the high diversity, the microorganisms in **EDAPRO** compost tea can quickly adapt to different locations or when the climate changes.

A healthy, regenerating soil is always well aerated and is home for the most part to oxygen-loving organisms. In order to specifically promote these beneficial microorganisms, the compost tea is permanently aerated during the production process.

## Does water quality matter?

Yes, water of drinking water quality without chlorine, rainwater or osmosis water is suitable for the production of **EDAPRO** Compost Tea. For foliar application, make sure that it is soft water with a water hardness below 7 °fH.

The background is a dark brown, textured surface representing soil. It is populated with various stylized, light green and yellow-green organisms. These include elongated, rod-shaped bacteria with dots inside, some with flagella, and larger, more complex structures like a multi-celled organism with a central nucleus and a wavy, thread-like structure. A white mouse cursor arrow points towards the URL. The overall style is illustrative and educational.

[www.edapro.ch](http://www.edapro.ch)