

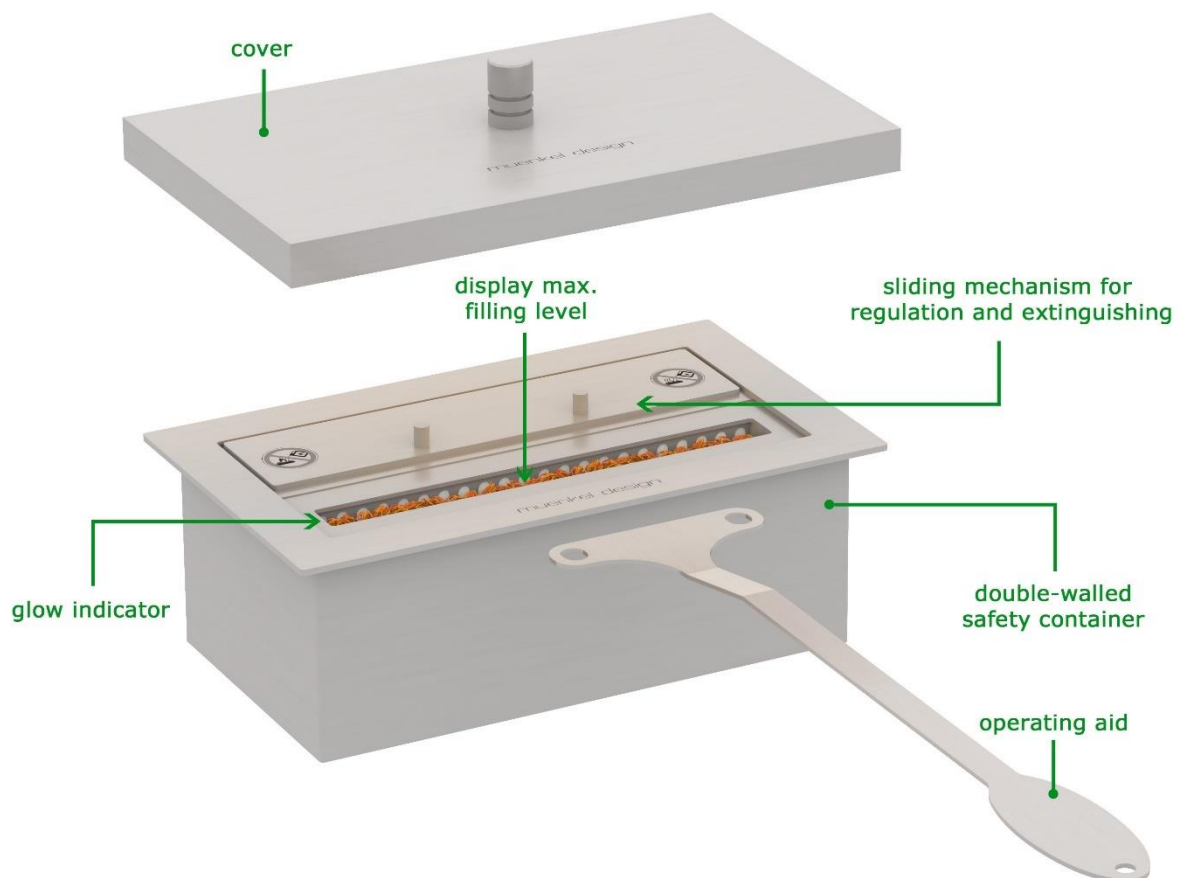
OPERATING AND INSTALLATION INSTRUCTIONS

safety burner > Bioethanol Safety Burner

Congratulations on your purchase of the muenkel design safety burner. We thank you for choosing one of our branded products. In the following, we introduce you to the safety burner and instruct you. Please read the instructions carefully. Afterwards we wish you a lot of fun and comfortable hours with the operation of your bio ethanol fireplace.

Content of delivery

- ✓ Adjustable safety burner made of stainless steel
- ✓ Operating aid for regulating the safety burner
- ✓ Glow indicator
- ✓ Cover
- ✓ Instructions for installation and operation



Installation

1. The safety burner may only be installed and rebuilt with non-flammable material (e.g. stainless steel, concrete, fire protection boards, ceramics, bricks, stone, etc.)
2. The materials used must be suitable for large temperature variations (e.g. heat-resistant glass), otherwise they may be damaged.
3. The burner must be integrated in a firm and safe position so that no ethanol can be spilled (for example by accidentally knocking over).
4. The burner should be integrated into a level surface without gradients.
5. The construction in which the burner is integrated must be constructed so that the burner can not slip.
6. The burner must not be installed next to wallpaper, laminate or other delicate and non-fire-resistant surfaces or appliances (such as TV sets) as they may be damaged by the heat.
7. Make sure that the burner opening is at least 100 cm away from curtains, flammable materials and other sources of fire. Also note the influence of drafts.
8. The burner should be shielded on at least one side (for example, the rear side facing the wall). To increase safety, however, we recommend leaving the burner accessible from one side only, i.e. shield 3 sides and the top with a non-flammable material (see "Important installation instructions" below). In this way, a quiet flame image is generated because draft is largely avoided.
9. No changes may be made to the burner.
10. Take each $\frac{1}{2}$ of the supplied glow indicator and distribute it loosely both on the right and on the left side of the burner.
11. The following distances must be strictly adhered to.

Important installation instructions

1. The front must be open to allow the heat to escape. The installation of a glass pane may only be done by prior arrangement.
2. Ensure that there is at least 100 cm of inflammable material on all open sides.
3. Distance between side wall or rear wall and burner:
 - a. The distance to a non-combustible side wall or rear wall must be at least 8 cm.
 - b. The distance to a combustible sidewall or rear wall must be at least 100 cm.
4. Distance upwards (measured from the upper edge of the burner):
 - a. The distance to a non-flammable lid must be at least 50 cm.
 - b. The distance to the top of combustible materials must be at least 150 cm.
5. A sufficient fire protection must be ensured around the combustion chamber. Flammable materials must not come into contact with the hot surfaces. The gap should be left empty. It is even better to provide this empty room with fire protection panels, which are available at the hardware store.
6. When installing without side walls and/or rear wall (for example in the middle of a table or in a sideboard in front of a wall), the non-combustible material into which the burner must be inserted shall project at least 20 cm beyond the burner in each direction. If glass panes are used, this amount may be reduced once the manufacturer has received planning permission and approval from the manufacturer.

Installation into a fireplace with chimney or a closed combustion chamber

1. The installation in a fireplace or stove/stove with chimney makes it absolutely necessary to decouple the fireplace from the chimney before the installation. Usually, commercial chimneys are not approved for operation with liquid fuels. Therefore, remove the stovepipe and close the access to the chimney.
2. For removal of the carbon dioxide and water vapor produced during the combustion of ethanol, it is necessary that an opening of sufficient size is present. Otherwise the fire goes out.
3. In closed combustion chambers, gases can accumulate. The burner shall not be left open in closed small combustion chambers (for example in a woodburning stove) for a longer period than necessary for filling. Otherwise, gases form in the combustion chamber, which can lead to deflagration when lighting. However, the fireplace should always remain open for 2 minutes before ignition to allow accumulated gases to escape before the burner ignites. An active ventilation can be beneficial.
4. Note that the heat output of the burner used must not exceed the heating capacity of the stove.

Fill and refill

1. Observe the following "Notes on filling".
2. If necessary, remove the cover and use the operating aid provided for this purpose to pull the slider all the way to the stop so that the incineration chamber is completely visible.
3. Fill the safety burner by slowly and carefully pouring bioethanol into the incineration chamber. You can use a clean funnel as an aid.

Notes on filling

- ! There are 2 reference symbols on the device. These indicate that the device must not be filled during operation or when it is warm.



- ! A weak ethanol flame is difficult to detect in daylight. Please use the glow indicator supplied and distribute it loosely on the right and left side of the burner. Nevertheless, the burner should always be covered for one minute before filling to ensure that any flames have extinguished.
- ! Only use high-purity bioethanol with a maximum ethanol content of 96.6%! The ethanol content must be at least 80%. We recommend 96.6% bioethanol for optimal flame formation.
- ! The use of another fuel (such as gasoline, kerosene) is prohibited.
- ! We recommend Gala Ethanol 96.6% from muenkel.eu, which is TÜV-certified and TÜV-certified in every batch. This prevents any unnecessary unhealthy combustion, avoids odors and ensures longevity of the device. Reference: www.muenkel.eu/ethanol
- ! When filling, use only a container with a pouring aid that can be brought close to the safety burner (for example, a canister with a [flexible] attachment).
- ! The safety burner must not be filled with bioethanol more than the "Max." mark or if the mark is not present, not more than up to 5 mm below the cover.

Ignition process

1. Observe the following „Notes on the ignition process“.
2. If necessary, remove the cover and use the operating aid provided for this purpose to pull the slider all the way to the stop until the incineration chamber is completely visible.
3. Fill the combustion chamber with ethanol to the maximum level.
4. Wait at least 30 seconds.
5. Ignite the fireplace by placing a burning rod lighter on the combustion chamber.

Notes on the ignition process

- ! The device must not be ignited while still in warm condition.
- ! A lighter must be used which ensures a sufficient safety distance.
- ! The fireplace may only be operated when the incineration chamber is fully opened, as otherwise the maximum permissible service life could be exceeded.

Deletion process

1. Use the provided operating aid.
2. Close the incineration chamber completely and with a quick movement by moving the slider over it.
3. If the burner can not be completely extinguished, place the cover on the burner with the handle pointing upwards.
4. Leave the burner closed for at least one minute before reopening it.

More information

Notes on the device

- The purchased device is a decorative outdoor or indoor fireplace, which is not intended for heating purposes.
- Do not allow water to get into the burner. Protect from rainwater.
- The device is not suitable for continuous operation.
- The device may only be operated under supervision.
- The construction of the device must not be changed.
- Only spare parts approved by the manufacturer may be used.
- The surfaces of the fireplace can get hot. Caution is advised.
- The operation of several units is only permitted if the total fuel flow does not exceed 0.5 L / h. In this case additional ventilation of the installation room is necessary.
- The filler in the burner and the material of the burner may discolour due to temperature. This is a normal process and therefore not a reason for complaint.
- Do not use harsh cleaners. Use a microfiber cloth and warm water.

Warnings for the fuel Bioethanol

- **R11** – flammable
- **S2** – Keep out of reach of children
- **S7** – Keep container tightly closed
- **S16** – Keep away from sources of ignition
- **S46** – If swallowed, seek medical advice immediately and show the container or label
- Compatible with 1% MEK and Bitrex: Not for consumption!

Information on the manufacturer

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