

Operating Instructions:

ThermoLux heating mats are made of water-proof and rot-proof materials, are absolutely watertight, and can be used without any danger in freshwater. They offer maximum safety due to the built-in, full-surface protective conductor. Always remove the plug from the power socket before cleaning the mat or working on the aquarium, to prevent danger of electric shocks.

The mats are connected by means of the plug direct to the 230V power supply, and at an ambient temperature of 20 °C, and without a cover, reach a maximum surface temperature of approx. 42 °C.

The heating of the mat depends however on the undersurface, the ambient temperature and the amount of substrate to be heated (sand, mulch, water etc.) and can take from several hours to days. When used without temperature limitation, take care to **avoid overheating** of the ThermoLux heating mat, since the mat can reach a temperature of over 100 °C if placed between dry substrates!

Please note the following safety instructions:

- Please note the specific usage instructions on the mat, the packaging and the following pages!
- Ensure that the cable does not become trapped or disconnected.
- Do not use the mat any longer if it or the cable are damaged!

24 month warranty for defects:

We offer our customers a guarantee of 24 months. The guarantee does not however apply in cases where damage due to overheating, or injury due to electric shock, is caused by improper use of the

equipment by the customer (failure to observe the safety and usage instructions, improper use, use for other purposes, continued use of damaged mats).

Use as a terrarium underlay

Note:

The mat **must not be placed in the terrarium**, since animals may crawl under it, or it may be damaged by animals with sharp claws.

The mat **must not be placed between two layers of insulating material** (e.g. styropor, wood shavings, other substrate material). This could lead to a build-up of heat, and damage to the terrarium or heating mat (see General Instructions)!

The mat should be placed under the terrarium so as not to cover the whole of the terrarium area, so that the reptiles are also left with cooler areas. In order to avoid heat loss, the ThermoLux heating mat should be placed on a sheet of styropor.

To avoid damaging the terrarium base by thermal and mechanical stresses, do not place the terrarium directly on the mat. Spacers (e.g. wooden slats) should be laid along the whole length of the terrarium base between the mat and the terrarium base, leaving an air gap of about 12 mm between the mat and the terrarium. This will ensure an even distribution of heat. Check the temperature change at the surface of the floor substrate using a thermometer, and adjust the separating distance to achieve the required temperature. Ensure that the humidity is sufficient to prevent the animals suffering from desiccation.

Use as an underlay for plants

Place the mat on a windowsill or direct in a hydro-culture vessel or seeding tray. Water regularly in order to avoid a build-up of heat and the drying-out of the substrate (earth, hydro-culture). The temperature of the soil depends on the volume of the vessel/tray and the surrounding temperature.

The **ThermoLux Temperature Regulator** can be used for controlling the temperature. The temperature will then automatically be maintained within the required range. The temperature regulation is only sufficiently accurate within the damp substrate. **Use as supplementary heating for an aquarium**

As supplementary heating for an aquarium, the ThermoLux heating mat ensures even heating of the aquarium floor material and water circulation, thereby aiding healthy plant growth.

Note:

For saltwater aquaria, the heating mat **may** only be used as an underlay, and must not be placed inside the tank!

Always remove the plug from the power socket before working on the aquarium!

1. Use in a freshwater aquarium

Immersion depth max. 80 cm. Do not use the mat in the dry condition, but only after filling the tank with water. This could otherwise create a build-up of heat which can damage the mat and the aquarium. The following formula should be used as a rule-of-thumb to determine the performance requirement for the size of aquarium in question: **1 Watt per litre of water**.

2. Use under the aquarium/saltwater aquarium

When using the mat as an aquarium underlay, please ensure that the aquarium is placed evenly on the mat over the whole base area, and without any air gap, in order to avoid stress to the glass and uneven weight distribution.

This arrangement should be used only for saltwater aquaria, since the mat works more efficiently when used inside the aquarium.

The **ThermoLux Temperature Regulator** can be used for controlling the temperature.

ThermoLux Temperature Regulator

Only for use with damp materials (earth, gravel, sand etc.) and water. Control range 18 - 36 °C (tolerance: damp substrate \pm 3 °C, water: \pm 0.3 °C), power supply/consumption 230V~ 400 W. In combination with a plug rail, several

ThermoLux mats with a consumption of up to 400 W can be controlled by one temperature regulator.

Please note the instructions on the packaging!

The following ThermoLux products are available:

ThermoLux heating underlays for animal and plant terraria

Dimensions Supply/consumption Art. No.

17.0 x 17.0 cm 230V~ 6 Watt	461265 + 461267
11.5 x 55.0 cm 230V~ 10 Watt	462265 + 462267
25.0 x 35.0 cm 230V~ 15 Watt	463265 + 463267
30.0 x 50.0 cm 230V~ 30 Watt	464265 + 464267
30.0 x 70.0 cm 230V~ 35 Watt	465265 + 465267
45.0 x 65.0 cm 230V~ 40 Watt	466265 + 466267

PetMat aquarium heating

Dimensions	Supply/consumption	Art. No.
23.0 x 42.5 cm	230V~ 40 Watt	468275
27.0 x 53.0 cm	230V~ 60 Watt	469275
31.0 x 72.5 cm	230V~ 80 Watt	470275

ThermoLux foot-warming mat

Dimensions	Supply/consumption	Art. No.
42.0 x 65.0 cm	1230V~ 70 Watt	473291

ThermoLux Temperature regulator

Switching capacity	Art.No.
230V~ 400 Watt	467061
Switching temperature, adjustable	18° - 36°C

Keim-Fix Seeding Tray

 Dimensions
 Supply/consumption
 Art. No.

 31.0 x 21.5 x 15.0
 230V~ 4 Watt
 471261

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