

Philips Thermal box  
Thermal box

**Fast cooling and freezing**

Powerful temperature control  
Versatile and easy to use  
Durable built-to-last design

LUMTB540X1



## Fast cooling and freezing on the road

### Powerful refrigeration to store food and drinks

Philips TB5401 is a high-capacity thermal box for your vehicle. With two separate compartments you can chill or freeze items. Its powerful eco-friendly refrigeration rapidly cools food and drinks\*.

#### **Dual storage compartments**

- Two compartments provide two independent storage zones

#### **Powerful temperature control**

- Choose the proper temperature from a wide range
- Fast cooling and freezing keeps the item fresh\*\*\*
- Keeps items cool for 48 hours even with the power off\*\*\*\*

#### **Versatile easy-to-use design**

- Large storage capacity up to 25 liters\*\*\*\*\*
- Versatile design with reversable door
- Dual modes for powerful cooling or energy saving
- Easy to use with touch control and LCD display
- Easy maintenance with drain outlet

# PHILIPS

## Thermal box

Fast cooling and freezing Powerful temperature control, Versatile and easy to use, Durable built-to-last design

# Highlights

### Dual storage compartments

With two separate compartments, the Philips TB5401 offers you flexible storage for food and drinks. So when you're on the road, you and your friends can enjoy chilled drinks and snacks, or keep refreshing ice-creams frozen.

### Wide temperature range

With an efficient refrigeration system, Philips TB5401 can reach temperatures as low as -22\*. This wide temperature range makes it suitable for a variety of storage needs. And you can easily adjust the temperature to choose between cooling or freezing. Its recommended that fresh breast milk is stored at 4 for up to 4 days, or -18 for 6 months.\*\*

### Fast cooling and freezing\*\*\*

When on the road, you might need to quickly cool or freeze on the road. Equipped with an advanced compressor, and an upgraded conductive aluminum liner, the Philips TB5401 offers high performance refrigeration. The device can drop the temperature to 0 (32F) in just 15 minutes, and to -10 (14F) in 30 minutes.\*\*\* So no matter how hot it is outside, you don't have to worry about food or frozen items defrosting, or cold drinks warming.

### Keeps cool with the power off

Insulated with high density foam, the Philips TB5401 minimizes heat transfer, locking in cool temperatures for longer. It takes 48 hours to rise to 0 from the device's lowest deep freeze temperature of -22. That means frozen items will stay frozen for 2 days even with the power off\*\*\*\*. Which is great if you want to turn off the car engine and still keep your food and drinks cool.

### Large storage capacity

The Philips TB5401 can hold a large amount of food and liquid. With a capacity of 25 liters, it can store 42 cans of beverage (330ml), or 23 bottles of water (550ml)\*\*\*\*\*. This makes it great for road trips, commercial trucking, camping and other outdoor activities.

### Useful versatile design

On other cooling devices, the door position may be fixed and only open in one direction. Depending on placement of the device, if the door position is fixed, it may prevent it from opening fully or it may be inconvenient to remove items. With the Philips TB5401 you can easily detach the door and reverse the opening direction. So you're free to position the device wherever works best for you.

### Dual modes to save energy

Do you need your Philips TB5401 cooled quickly? Then select Max mode to use the full power of the refrigeration system. Need to keep items cool, but not in a hurry to reduce the temperature? Then select ECO mode to save energy, it consumes less than 1kWh per week.\*\*\*\*\*

### Control it with a touch

With a quick touch of the control panel, you can set the temperature, select battery protection mode, and choose between full power and ECO mode. The LCD display also helps you easily check the temperature, even when it's dark.

### Easy to maintain

When cleaning the device, instead of using an old cloth to slowly mop up the excess water, you simply unplug the drain and the water pours away. Plus, the interior can easily be wiped clean. This makes cleaning the device much easier and faster.

### Anti-shake and anti-tilt

The Philips TB5401 is designed for the reality of the road. It is built to withstand the shakes and vibrations of bumpy roads. Plus, it can cope with very steep inclines, up to 40 (which means it can cope with roads on the planet). Its so tough you can even use your thermal box when driving off-road.\*\*\*\*\*

### Protects your car battery

There is no point enjoying chilled food and drink to find your car battery is dead as a result. With a 3-level (high, medium or low) battery protection function, the Philips TB5401 is designed not to deplete your vehicle's battery. The device will detect the DC voltage and automatically shut off the compressor when it reaches a cut-off value, protecting your battery.

### Suitable for cars and trucks

The Philips TB5401 is compatible with the power outputs of different vehicles. So whether you're in a 12V car or a 24V truck, you can safely use the thermal box to store the items at just the right temperature.

### Eco-friendly refrigerant

Philips TB5401 uses eco-friendly refrigerant R600a, which has zero ODP (Ozone Depleting Potential), low GWP level (Global Warming Potential) and high efficiency.\*\*\*\*\* Because of this, it is a much more sustainable refrigerant option and helps to protect the environment. The device is also built to exacting manufacturing standards. So not only can you rely on its quality and performance, you can be sure it's a product built to last.

LUMTB540X1/50

# Specifications

### Product description

- Automatic On/Off
- Power [W]: 60
- Technology: Compressor
- Refrigerant type: 600a
- Volume(L): 25
- Noise level (db)(GB/T std): <50
- Operation mode: MAX/ECO
- Battery protection: 3 levels
- Voltage [V]: 12/24
- Refrigerant weight(g): 17
- Big compartment size(mm): 248\*295\*315
- Small compartment size(mm): 245\*150\*105

### Performance

- Temperature range: Down to -22\*
- Climate class: SN N ST T
- Cooling time from 20C to 0C: 15 minutes
- Freezing time from 20C to -10C: 30 minutes
- Tilt angle: 40°
- Certification: CCC,RoHS,CB,UKCA,FCC,CE

### Logistic data

- Quantity in box: 1

\* \*Temperature range: room temperature to -22°C Monitor thermal box temperature range. Tested by inhouse lab with an environment temperature at 20°C, on an empty thermal box, measuring the temperature drop curve.

\*\*Sources regarding safe storage temperatures for breast milk: Human milk storage guidelines by CDC USA.

\*\*\*Monitor thermal box fast cooling time from 20°C to 0°C in 15 minutes and freezing time from 20°C to -10°C in 20 minutes. Tested by inhouse lab with an environment temperature at 20°C, on an empty thermal box. Applies to thermal box. Temperature drop of content will vary.

\*\*\*\*Monitor thermal box temperature display when it's powered off. Tested by inhouse lab on a fully loaded thermal box with an environment temperature at 32°C, turning off the power once the box reached a temperature of -20°C. Applies to thermal box. Temperature drop of content will vary.

\*\*\*\*\*Actual storage capacity measured by inhouse lab.

\*\*\*\*\*DC power supply to monitor thermal box ECO mode power consumption Tested by inhouse lab with an environment temperature at 25°C, on an empty thermal box, setting the temperature to -20°C and measuring 1 working cycle power consumption. 1 week power consumption based on driving 2.2 hours per day.

\*\*\*\*\*T Tested by internal lab, by tilting the thermal box at an angle of 40° for 2 mins when the device is powered. Use sealed containers to avoid spills.

\*\*\*\*\*Datasource of ODP and GWP: R-600a Isobutane Refrigerant Fact & Info Sheet. <https://refrigeranthq.com/r-600a-isobutane-refrigerant-fact-info-sheet/>



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