



Solar Kettles - Frequently Asked Questions

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What is a Solar Kettle?

It is an evacuated vacuum tube which absorbs solar energy and converts it directly into the energy which heats the water inside. Each tube is constructed like a thermal flask, so the heat energy goes in but doesn't come out. The vacuum tube consists of two borosilicate glass tubes. The ends of the tubes are fused together with the space between them being evacuated. The insulation properties of the vacuum are so good that while the inside of the tube may be 175°C, the outer tube is cold to touch.

What is the capacity of a solar kettle?

Current models hold around 500 ml, enough for 3 cups of tea.

How long does it take to heat the water?

In good sunshine it can heat water from cold to boiling point in about two hours.

Does the solar kettle need sunshine?

Yes if it casts a shadow it will work effectively. It is the solar radiation which gets absorbed by the kettle. The air temperature is not a factor. This enables a solar kettle to perform well even in cold weather.

What if there isn't enough sunshine?

It can still be useful even in dull conditions because it can be used to pre-heat water. Another great advantage is that it has superb heat retention. So in winter it can be used as a thermal flask - put hot tea or coffee in a solar kettle and it will keep hot all day. (Remember, though, that with tea and coffee it is best not to put milk in until just before drinking.)

How does a solar kettle balance in use?

It comes with a stand which locks into the reflectors when they are extended. This holds the kettle at the optimal angle for receiving the sun's rays. The base has been designed in the shape of a 'D' and there are fold-out legs which can be used on grass or rough ground to provide extra stability.

Is a solar kettle fragile?

The borosilicate glass is toughened to make it strong. The tubes are durable and have been tested to withstand hail up to 25 mm in diameter. The reflectors fold to form a case which provides additional protection during transit. However like with a thermos flask you should handle the kettle with care and not drop it.

Who might use a solar kettle?

Any type of outdoor enthusiasts would find one useful - campers, backpackers, mountain bikers, river fishers, bird watchers and mountaineers for example. And, of course, it can be used at home just to heat water or keep it hot for much longer.

How much does one weigh?

They are popular with outdoor enthusiasts because they weigh only 1.3 kg.

What about other uses for a solar kettle?

These are only limited by one's imagination: sterilising water, cooking, boiling eggs, heating soup or rice, melting snow for drinking water - the list goes on.

Visit our website for more information and discussionwww.solarkettle.co.uk