

Narika product name:

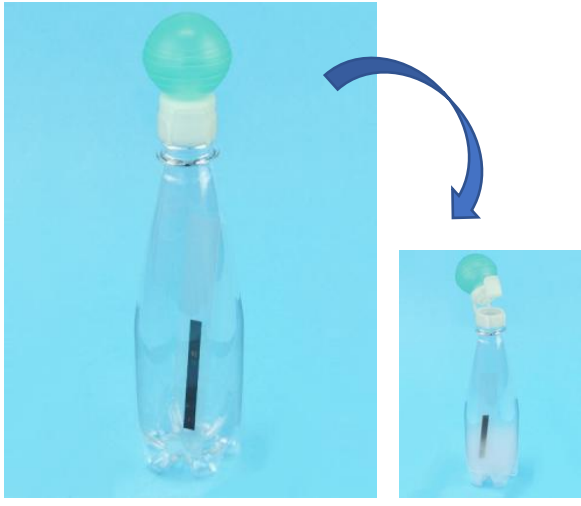
Cloud Bottle

Common product name:

Cloud Generator Based on Adiabatic Process (compression/expansion)

Catalog Number:

J46-3511-W0



Overall advantages to users:

- Cloud appears inside the bottle when releasing internal pressure of the bottle soon after pressuring enough air inside using the pump at the top of the bottle.
- Easy to understand the process of cloud generation and adiabatic process.
- Temperature increase during compression and decrease after release of inner pressure can be observed.

Benefits to users:

- **To all users:**
 - Possible to do hands-on experiments on the mechanism of cloud generation based on thermal compression and expansion because of its simplicity and affordability.
- **To teachers:**
 - Possible to demonstrate very frequently because no special preparation or setup is needed.
 - Possible to do students' experiment without fear of breaking it due to its affordability.
- **To students:**
 - Easy to understand the principle and theory of adiabatic compression/expansion because students can directly observe the temperature increase caused by pressure increase inside bottle, as well as, the temperature decrease caused by pressure release from the bottle.
 - Easy to realize and recognize that mechanism of cloud generation is based on adiabatic compression/expansion in fun and interesting way.
 - Easy to get familiar with the topic because students will not hesitate to repeat their experiment as much as they like and will not worry about damage to the product because it is made of common and inexpensive material (PET bottle).

Keywords:

- Weather
- Adiabatic Compression (Thermal Contraction)
- Adiabatic Expansion (Thermal Expansion)
- Cloud Generation

Specifications:

- Container: PET bottle (350ml) x1 pc
- Handy air pump: x1 pc, (Heat resistance up to 60°C)
- LCD thermometer: 10~32°C x1 pc

- English ver. instruction manual available? → Yes
- Movie available? → Yes

Link to distributor(s)

<https://tinyurl.com/yxypiunb>