

Narika product name:

Cloud Chamber (Cold Plate Type) KK-01

Product Description:

Easy-setup & Cold-plate type Cloud Chamber

Catalog Number:
B10-7764-W1



Keywords:

- (Natural) radiation

Overall advantages to users:

- Safe and affordable Cloud Chamber requires no dry ice, no liquid nitrogen or no power source.
- Comes with specially designed "Cold Plate" capable of retaining a low temperature for about 1 hour by freezing in a standard freezer for at least 24 hours whose temperature can be set to -20°C (-68°F), as well as, of being used repeatedly by freezing it again.
- Radiation tracks can be observed for about 20 minutes (until ethanol is vaporized) in a room at 25°C (77°F).
- The only consumables required to observe radiation tracks are ethanol (99.5%) and hot water ($50\sim 80^{\circ}\text{C}$).

Benefits to users:

- To all users:
 - Students' observation by group is possible because the effective observation areas are $95 \times 95\text{mm}$ times 4 sides.
 - Radiation tracks from a natural radioactive rock can be observed if putting such rock inside the chamber.
- To teachers:
 - Affordable and portable enough to observe radiation tracks within a class time.
 - Shorter time and lower cost required for preparation because no dry ice and liquid N_2 are needed.
- To students:
 - Easy set up by just putting observation chamber and hot water bath on the cold plate.

Specifications

- Cold plate : 1 unit (Size: $150 \text{ mm} \times 150 \text{ mm} \times 35 \text{ mm}$)
- Chamber (Observation Dome): 1 unit (Material: Transparent PVC, Size: $100 \text{ mm} \times 100 \text{ mm} \times 110 \text{ mm}$),
- Tank of hot water: 1unit: - Material: PVC; - Felt fabric on the bottom back surface; - Charging metal of intermediate layer: Aluminum; - Size: $130 \text{ mm} \times 130 \text{ mm} \times 70 \text{ mm}$,
- High power LED Light: 1 pc; Substituted radioactive source : 1 pc; PVC rod: 1pc (Size: 24mm)