

F35-1476-W1

Blue Cup for Evaporation to Dryness



[Product Description]

Blue-colored evaporating cup (dish) suitable for students' experiment of evaporation to dryness.

[Overall Advantages to Users]

Dissolved substances that appear (dry) on this deep evaporating dish are instantly recognizable for students in comparison to commonly used white colored evaporation dishes.

[To teachers]

- Unlike conventional porcelain (ceramic) evaporating dishes, this product has less risk of burning and/or hurting students because it does not break when dropped or when heated on an open fire even before the outer surface is fully dried up.
- Compact storage possible because of the stackable shape.

[Specifications]

- Size: \varnothing 100 x 35 mm (excluding the handgrip)
- Material: Steel coated with annealed powdered glass

[Precaution]

- ✓ Wear safety glasses and gloves during experiments.
- ✓ Place the dish in a proper position of a heater such as a Bunsen or a stove burner.
- ✓ Do not touch the evaporating dish with your bare hands during or soon after heating.
- ✓ Do not look directly into the evaporating dish during heating.
- ✓ Stop heating the evaporating dish soon after the solution starts evaporating.
- ✓ Do not heat the evaporating dish without solution inside.
- ✓ Let the evaporating dish cool down naturally. Otherwise, the coated surface of the dish can crack.
- ✓ Ventilate the room enough during experiments.

[How to evaporate to dryness:]

1. How to set up:
 - 1) Prepare heater such as a Bunsen/stove burner or a spirit lamp.
 - 2) Prepare a tripod or a backing ring attached to a support stand.
 - 3) Place a wire gauze with ceramic center on the tripod or backing ring.
 - 4) Place the dish on the center of the wire gauze.
2. Put a small amount of solution (around 3 mL) into the dish.
3. Ignite the burner/lamp and heat the solution in the evaporating dish.
4. Evaporate the solvent (water) from the solution to check if there is any residue left on the dish.

[Maintenance and Storage]

- Wash the dish with a soft sponge and neutral detergent before drying.
- Do not use any scourer or cleanser to prevent the surface from being scratched.
- In case residuum and/or scorched substance remains on the dish, wash and remove it using sodium hydrogen carbonate solution before drying.

[Examples of students experiments]

- Separate potassium alum or sodium chloride from the solution through the process of evaporation to dryness to learn about the solution and solute.
- Compare how the appearance of residue produced by evaporating salt water differs between the processes of evaporation to dryness and natural drying.
- Carry out the process of evaporation to dryness on each of saltwater, carbonic water, and ammonia water, and identify which one is the saltwater.



[Keywords]

- Evaporation to dryness
- Natural dryness
- Evaporation and Crystallization
- Solute, Solvent, and Solution

September 2023