

**OBSERVATION TANK** FOR ELECTROSTATIC FIELD EXPERIMENT N99-B10-1491-01



The Nakamura Observation tank is a unique apparatus that is designed for the observation of electric lines of force. The visible lines are generated by applying an external electric field to the observation cell, which is filled with a special solution. The observation tank is an essential component to successfully conduct electrostatic experiments. Individual or classroom size demonstrations can be conducted by using an overhead projector.

Select any of the five electrode plates to enhance the experiment.

## PREPARATION

- 1. For best results the experiment should be done right after shaking. The particles in the the tank will sink gradually afterward.
- 2. The tank should be shaken very well before and after each experiment using different plates.
- 3. In case of residual static electricity build up, wiping the tank lightly with a wet cloth allows the remaining electrostatic field to dissipate.
- 4. When your experiment is performed on an overhead projector, the heat can cause the tank to distort patterns. The tank should not be used with a projector that generates a temperature above 40°C.
- 5. In experiments under extremely humid conditions, such as in a rainy season, electric fields may be hard to obtain. In such case, the surface of the tank should be wiped lightly with a cloth dampened with ethyl alcohol to remove moisture from the surface temporarily.
- 6. The tank and some of the other components can be damaged by organic solvents since the tank is made of plastic. When the surface is contaminated, any plastic should be wiped with a cloth dampened with soap solution.

## **SPECIFICATIONS**

- Observation Tank: Made of Acrylic
- Composition: Silicone oil & wood chips
- 16cm x 10.5cm x 0.7cm (L x W x D)



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