



P5762

### Dew Point Hygrometer

#### PRINCIPLE POINTS

- ◆ Enables the water vapour content of air at atmospheric pressure to be evaluated
- ◆ Use of evaporating refrigerant allows gentle cooling of highly polished disc
- ◆ Dew point determined by visible presence of water vapour
- ◆ Temperature measured with bulb thermometer

slowly reduced by an evaporating refrigerant which is held in a small chamber brazed below the highly polished surface. The refrigerant should be chosen to suit local regulations. The refrigerant is placed in the vessel by means of the supplied pipette.

To ensure the circulation of air a small fan is provided to ensure that the air over the polished surface is not effected by the refrigerant and to ensure that sufficient vapour passes over the surface to form visible condensation.

#### TENDER SPECIFICATION

The Dew Point Hygrometer is to be of the condensing vapour type. A self contained experiment is to be provided, to include a polished metal surface on which water vapour can be seen to condense. A chamber is to be brazed to the surface in which an evaporating refrigerant can be placed. A pocket is to be provided for the insertion of a mercury bulb thermometer reading in the range 0 to 50°C. The thermometer and a pipette are to be included in the kit, which should all be contained within a padded carrying case.

An instruction manual is to be provided.

#### FEATURES

- ◆ Highly polished metal surface brazed to a small chamber
- ◆ Small chamber suitable for evaporating refrigerant
- ◆ Pipette provided to allow safe introduction of the refrigerant
- ◆ Mercury thermometer provided to allow determination of condensation temperature
- ◆ Pocket provided in the highly polished surface for the thermometer
- ◆ Small fan provided to ensure gentle circulation of air
- ◆ Supplied in a suitable storage case

#### DESCRIPTION

Cussons P5762 Dew Point Hygrometer allows the determination of the water vapour content of air at atmospheric pressure.

Vapour condenses when the temperature falls to its dew point, and the formation of the vapour droplets on a highly polished surface allows easy identification of the dew point. The highly polished surface has a pocket drilled just below its surface into which a bulb thermometer can be placed.

The temperature of the highly polished surface is