

YH1200 Haze Meter: Standard Operating Procedure

1. Definitions:

- a) Haze: The amount of light that is subjected to Wide Angle Scattering (angle greater than 2.5° from normal). In the YH1200, it is represented by H.
- b) Transmittance: The amount of light that passes through a material when compared to the amount of light incident on the material. In the YH1200, it is represented by T.
- c) Light Sources / Illuminant: The kind of light that needs to be simulated by the instrument. YH1200 has three options:
 - D65: The average daylight spectrum at a correlated color temperature (CCT) of 6504K
 - C: The average daylight spectrum on a cloudy day
 - A: Incandescent tungsten-filament lighting which has a warm, yellowish tone

2. Calibration:

- a) On the touchscreen of the YH1200 haze meter, press the home icon and select **Calibration**.
- b) The calibration process has 2 steps—0% calibration and 100% calibration.
- c) For 0% calibration, cover the measurement aperture with the calibration lid and ensure that no light can pass through.
- d) Press the testing key to start calibration.
- e) After a few seconds, 0% calibration will be completed.
- f) For 100% calibration, remove the calibration lid from the measurement aperture and ensure that there is no obstruction between the light source and the measuring aperture.
- g) Press the testing key to start calibration.
- h) After a few seconds, 100% calibration will be completed.
- i) Press the back key to exit calibration

3. Pre-Test Settings:

- a) Light Source:
 - The recommended light source as per ASTM D1003 is 'C'.
 - To select the light source, go to Menu > Display > C light source.
 - Ensure that the remaining light sources are not selected.
- b) Testing Standard:
 - The recommended testing standard for packaging materials is ASTM D 1003.
 - To select the standard, go to Menu > Standard > ASTM.

4. Measurement:

- a) To measure a sample, remove the calibration lid.
- b) Place the sample flatly on the measuring aperture. Ensure that the sample covers the entire measuring aperture.

- c) Press the measurement button. The values for H and T will immediately appear on the screen.

5. Renaming Records:

- a) To rename an existing record, select the default name present on the left-top of the screen.
- b) Enter the name of your choice and select the tick mark to enter.

6. Recalling Data:

- a) To recall an existing record, go to Menu > Data.
- b) A list of all previous records will appear on the screen.