

# DIGITAL HAZEMETER

## 68-21-00



### Features

- Integrated Digital readout
- Easy to use: direct reading obtained quickly
- Versatile: measure in the laboratory or in the plant
- Immune to ambient light: sample compartment is light tight
- Optical geometry: 0° degrees illumination with diffuse viewing
- Resolution of 0.1% obtainable
- Minimum sample size: 25.4 mm diameter

The Digital Hazemeter measures the haze (light scattering) and the light transmitting properties of plastic sheets, film, glass, and liquid products. Measuring haze involves separating scattered light from directly transmitted light. The percentage of transmitted light which deviates more than 2.5 degrees from the incident beam by forward scattering is considered to be haze.

Its unique optical design allows the evaluation of large or small specimens in a wide variety of industries. The Hazemeter features 0° degree illumination, diffuse viewing geometry for accurate measurement of haze, total luminous transmittance, and diffuse transmittance. The optical system eliminates the need for sphere-pivoting. Measurements can be made quickly as samples can be hand-held or placed at the measurement port. Thickness of the sample is also not a problem since source and receptor modules are spaced 90 mm apart.

The sample is placed in holder at entrance to sphere. Readings are taken with the sphere in each of its two positions - one where the light trap is in the beam and the other where the beam falls entirely on the inner surface of the sphere. Calibration is automatically achieved when the microprocessor switch is activated. Similarly, the haze reading is displayed when the 'press to read' button is depressed.

### Applications

- Adhesives
- Automotive
- Ceramics
- Chemical
- Coatings
- Cosmetics
- Detergents
- Dyestuffs
- Food
- Glazing products
- Printing Inks
- Packaging materials
- Petroleum
- Pharmaceuticals
- Plastics
- Polishes
- Resins
- Varnish
- Waxes

### ***Below are examples of how the Hazemeter can be used for evaluating***

- Plastic films for packaging
- Laminated car windshields
- Translucency of signs or rear-projection screens
- Translucency of ceramics
- Evaluation of the effect of detergents in cleaning glass wear
- Detection of flocculation in varnish or lacquer
- Scratch resistance evaluation of plastic glazing materials or face shields (taber resistance)
- Haze and transmittance of clear or colored plastic or glass
- Haze and transmittance of petroleum products

Specifications	
Model	68-21-00
Sample size	Wide variety of sample size due to unique design; Illumination beam 90 mm above base plate
Sample port	Transmission: 22 mm diameter
Illuminated Area	Transmission: 15 mm diameter
Geometry	0° degree/diffuse (0° degree illuminating, diffuse viewing)
Traceability	National Standards NPL
Spectral response	In conformance with CIE luminosity function illuminant A & C
Repeatability	0.1 unit
Reproducibility	0.3 unit
Warm-up time	1 minute
Zero drift	None
Full Scale Drift	Less than 0.1 unit in 5 minutes after warm-up
Operating Temperature	5° to 50° C degrees
Storage Temperature	-10° to 65° C degrees
Electrical	110-230 VAC 50-60 HZ
Dimensions	530mm W x 240mm D x 200mm H (21 in x 9.4 in x 8 in)
Weight	12 kg ( 27 lbs)
Options	<ul style="list-style-type: none"> <li>• 232 serial port</li> <li>• Glass cell for haze and transmission of liquids</li> <li>• Taber abrasion adaptor</li> </ul>



### Standards

ASTM D1003	Standard Test Method for Haze and Luminous Transmittance of Transparent Plastics
BS 2782	Methods of testing plastics. Optical and colour properties, weathering. Methods of exposure to laboratory light sources
ISO	Standards for pivotable sphere hazemeters

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