

Ideally suited for quality control measurement

An easy to use hand-held instrument for the measurement of, opacity or luminous reflectance, of a grey scale.

Suitable for the evaluation of a coatings hiding power, or simple shade sorting tasks of metallised films, anodized aluminium or ceramics.

Using the same optical geometry as most colorimeters and an illuminant in close conformance to CIE 'C', it correlates well with observed results given by the human eye.



Features

- Automatic calibration on 2 included calibration standards
- Large backlit LCD display of individual readings
- Rechargeable batteries, with dual voltage mains battery recharger supplied.

Principle of operation

The instrument measures the diffusely reflected light from the test surface. The controlled conditions of illumination and angle of illumination allow surfaces to be characterised according to their lightness or darkness. A completely black surface will read a (zero), whilst a perfect white will be 100 units, recognised in colour measurement scale as the 'Y' value.

OPAC Opacity Reflectometer (310) can be used for comparison of contrast ratios (hiding power) of paints. The procedure involves applying the test sample onto black and white card or onto polyester sheets which are then placed over black and white glass plates.

Readings are taken on the coating over the black portion followed by a reading taken over the white portion.

The readings are expressed as a contrast ratio from the formula:

$$\frac{\text{Black reading}}{\text{White reading}} \times 100$$

International standards

Conforms to BS3900 D4 - ISO 2814 - ISO 6504/1 - ASTM E97

Technical specification

| Function | Description |
|----------------|-----------------------------|
| Geometry | 45/0° |
| Illumination | CIE Illuminant C |
| Display | Backlit LCD |
| Scale | 0 - 100 units |
| Accuracy | ± 1 unit or 1% (full scale) |
| Calibration | Push button, 2 standards |
| Measurement | Individual reading display |
| Measuring area | 9 x 13 mm |
| Power | Rechargeable batteries |

Ordering information

| Product Ref | Description |
|-------------|--|
| SH0657 | Sheen-Opac Opacity Reflectometer (310) |

Owing to continuous development, we reserve the right to introduce improvements and modify specifications without prior notice.

Standard supply

Sheen-Opac product, calibration standards, dual voltage mains recharger and carrying case.

Associated products

Please see our website for Hiding power charts, Polyester sheets, and Film applicators.