

# **OPERATING MANUAL**

# Methylene Blue Value Set HM-58R

#### AASHTO T 330

#### **INTRODUCTION:**

The Methylene Blue Value of fine aggregate is a measure of the amount of potentially harmful fine material present, such as clay and organic material. In performing the test, sample passing the No.200 ( $75\mu$ m) sieve is maintained in dispersion with distilled water by mixing with a magnetic stir bar. Methylene Blue solution is titrated into the stirred dispersion in increments until a drop of the mixture on filter paper shows a blue ring indicating that the sample can absorb no more reagent. Methylene Blue Value (MBV) is simply a measure of the amount of reagent absorbed and is proportional to the amount of clay or organic material present.

The HM-58R Set includes 25g of methylene blue reagent in powder form, 50x0.1ml amber glass buret, buret clamp and stand, two 500mm amber storage bottles, three glass 600ml beakers, two glass droping rods, a 1L volumetric flask and 100 sheets of 24cm filter paper.

#### **METHYLENE BLUE SOLUTION:**

Once prepared with distilled water, Methylene Blue solution is light sensitive. A maximum shelf life of four to six months can be achieved when stored at room temperature in amber foil-wrapped bottles in a dark cabinet. In the HM-58 Set, Methylene Blue is supplied in a stable powder form, sufficient to make 5L of solution in small batches for use within a few months of time.

### **OPERATING INSTRUCTIONS:**

**NOTE:** Please refer to AASHTO T 330 for complete and detailed test protocol. These instructions are intended only as a guide for general operation of this set.



HM-58R

### ACCESSORIES:

REPLACEMENT ACCESSORIES	
Description	Model
Powder Reagent, 25g	HMA-78
Filter paper, 24cm dia., pkg. 100	HMA-79
Volumetric Flask, 1,000ml	SG-1000
Griffin Beaker, 600ml	GW-34

Inquire for extra amber solution storage bottles or for replacement special amber glass buret.

#### Required accessories available from Gilson:

- MA-1827 Magnetic Stir Plate & Stir Bar
- Balance, Electronic, 310 x 0.01g
- Timer, 0-99min. x 1sec.
- · Sieve, 8in Full-Ht., Brass, No.200 V8SF #200
- Pan, 8in Full-Ht. V8SFXPN
- Sieve Shaker

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