Paint-4(Cup Type)Viscometer XND-1

Summary:

The instrument is suitable to measure viscosity of paints under 150s. The instrument is designed and made as per

The National Standard GB/T1723 “Test Methods for Viscosity of Paints”. It is a portable instrument. It is used to measure specific viscosity of paints. The specific viscosity of paint is expressed as the elapse time of sample flowing out from a standard effuse hole after you fill the sample to be determined to the specific container. The unit is second.

II. Main technical features:

1. The instrument is made of copper and it is about 100ml. Its specification and the roughness of its inner wall can meet the stipulations of GB/T1723. Its bottom is a stainless steel effuse hole.
2. Correction coefficient K: Multiply the measured viscosity of the instrument with the correction coefficient K to get the specific viscosity of the instrument. The correction coefficient K should be in the range of 1±0.03, or you should replace the instrument. You should calibrate the instrument as per the operation frequency.
3. For standard liquid with known kinematic viscosity, the difference between the measured value and calculation value of flowing time should be within ±3% of the calculation value.

III. Principle and calculation:

The viscosity measured by the instrument is specific viscosity. The specific viscosity is expressed as the elapse time of a certain quantity of sample flowing out from an effuse hole of stipulated diameter under a specific temperature. It is indicated by second. You can use the following equations to convert the flowing time of sample (s)into kinematic viscosity (mm2/s).

$t<23s, t=0.154\mu+11$

$23s\leq t\leq 150s, t=0.223\mu+6.0$

Where:

t=flowing time, s

U=kinematicviscosity,mm2/s