

## VISCOSITY CUPS ACC. / SIM. TO DIN EN ISO 2431

VF2048, VF2049, VF2183, VF2050, VF2051

### PRODUCT DESCRIPTION

The process of flow through an orifice can often be used as a relative measurement and classification of viscosity. This measured kinematic viscosity is generally expressed in seconds of flow time which can be converted into Centistokes using a viscosity disc calculator. Viscosity Flow Cups are used for measuring the consistency of paints, varnishes and other similar products.



### STANDARDS

DIN, EN, ISO 2431. The ISO 2431 standard replaces all prior national standards such as AFNOR, ASTM, BS, DIN, NENORM etc.. Look up the appropriate standard for a correct execution of the test.

### FEATURES

- A relatively deep well surrounding the top of the cup serves to catch any overflow.
- The design of the cup and orifice eliminate hard to clean recesses.
- The outside dimensions have been chosen to support the TQC stands.
- TQC viscosity cups are made under the continuing quality control procedures.
- Each cup is provided with an engraved unique serial number.

### ORDERING INFORMATION / SPECIFICATIONS

#### ORDERING INFORMATION Viscosity cup ISO 2431

Art. No	Ori Ø	Range	Material	Weight	DxWxH
VF2048*	3 mm / 0,12 inch	7-42 cSt	Aluminium	337 g / 11,89 oz	92x92x85 mm / 3,62x3,62x3,35 inch
VF2049*	4 mm / 0,16 inch	34-135 cSt	Aluminium	337 g / 11,89 oz	92x92x85 mm / 3,62x3,62x3,35 inch
VF2183*	5 mm / 0,2 inch	91-326 cSt	Aluminium	337 g / 11,89 oz	92x92x85 mm / 3,62x3,62x3,35 inch
VF2050*	6 mm / 0,24 inch	188-684 cSt	Aluminium	337 g / 11,89 oz	92x92x85 mm / 3,62x3,62x3,35 inch
VF2051*	8 mm / 0,31 inch	600-2000 cSt	Aluminium	337 g / 11,89 oz	92x92x85 mm / 3,62x3,62x3,35 inch

\* Calibration certificate optional

### SCOPE OF SUPPLY

Each viscosity cup comes with a hard plastic storage case, with protective soft material on the inside.

### ACCESSORIES

- CL0030 Test certificate, type M, according to DIN 55350 part 18, for ISO viscosity cup
- VF2062 Ring stand for viscosity cup
- VF2068 TQC Temperature Control Jacket for ISO and AFNOR Viscosity Cup; With tripod
- VF2061 Tripod stand Type S40B, stainless steel ring incl. Spirit level
- DI0076 Stopwatch Type C510 digital LCD-display, 9h. 59 min. 59,99 sec.
- VF2053 Viscosity Conversion Disc

TE0027 TQC precision thermometer  
VF2063 Glass plate GP20

## USE

---

- According to the standard all measurements should be made at 23°C. Temperature drift during the test should be kept to a minimum and should not exceed  $\pm 0,2$  °C. Adjust the temperature of the material to be measured if necessary.
- Select the proper orifice to be used from the specification table, which depends on the expected viscosity range of the material to be measured.
- Once the viscosity cup is truly horizontal (this is best achieved using a cup stand with spirit level), cover the exit orifice and fill the cup making sure that the meniscus of the liquid is above the rim of the cup.
- Using the glass draw plate, remove the meniscus into the overflow ring and close the cup.
- The distance between the orifice of the flow cup and the surface of the receiving sample has to be more than 100mm. Open the exit orifice and remove the glass draw plate. Time between the removal of the glass draw plate and the first break in the liquid's flow is measured.

## SPECIAL CARE

---

- Though robust in design, this instrument is precision-machined. Never drop it or knock it over
- Always clean the instrument after use.
- Clean the instrument using a soft dry cloth. Never clean the instrument by any mechanical means such as a wire brush or abrasive paper. This may cause, just like the use of aggressive cleaning agents, permanent damage.
- Do not use compressed air to clean the instrument.
- Always keep the instrument in its case when not in use.
- We recommend annual calibration

## SAFETY PRECAUTIONS

---

Determining viscosity may involve hazardous materials, operations and equipment. It is the responsibility of the executor to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to the measurement.

## DISCLAIMER

---

The right of technical modifications is reserved.

The information given in this sheet is not intended to be exhaustive and any person using the product for any purpose other than that specifically recommended in this sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at his own risk. Whilst we endeavour to ensure that all advice we give about the product (whether in this sheet or otherwise) is correct we have no control over either the quality or condition of the product or the many factors affecting the use and application of the product. Therefore, unless we specifically agree in writing to do so, we do not accept any liability whatsoever or howsoever arising for the performance of the product or for any loss or damage (other than death or personal injury resulting from our negligence) arising out of the use of the product. The information contained in this sheet is liable to modification from time to time in the light of experience and our policy of continuous product development.