



Immersion Viscosity Cups compatible with ASTM D 1200 (Ford)

- 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. Dip cups can be used to provide a quick viscosity measurement on the shop floor or on site.
- Standards:** Compatible with ASTM D 1200
- Application/ application area's:** Laboratory, manufacture
- Features:**
- Each cup has a long loop handle to allow the cup to be dipped by hand into a liquid container, which makes it easy to quickly check and adjust the viscosity of many different type of liquids.
 - The design of the cup and orifice eliminate hard to clean recesses.
 - TQC viscosity cups are made under the continuing quality control procedures.
 - Each cup is provided with an engraved unique serial number.



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

Optional items:

- VF2210 Test certificate, type M, according to cup type TF No 1-5, ASTM D 1200.
- DI0076 Stopwatch Type C510 digital LCD-display, 9h. 59 min. 59,99 sec.
- VF2053 Viscosity Conversion Disc

- Use:**
- ▶ According to the standard all measurements should be made at 25°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. Lower the cup into the material so that the top rim is submerged.
 - ▶ Place a thermometer into the cup as it is immersed and determine the temperature of the confined sample.
 - ▶ Remove thermometer.
 - ▶ Hold cup vertically by inserting index finger into handle ring. In a quick, steady motion, lift the cup out of the sample material, starting the timer when the cup breaks the surface. During the flow time, hold the cup no more than 15 cm above the level of the sample material.
 - ▶ Stop the timer when the first definite break in the stream at the base of the cup is observed.

Technical data:

Immersion Viscosity Cup Type TF
 Cup: titanium anodized aluminum, 103.5 cm³
 Nozzle: stainless steel, fixed
 Handle: stainless steel.
 Complies with: ASTM D1200
 Weight: 172-174 gram*
 Maximum Width: 63 mm
 Cup height: 73 mm
 Total height: 253 mm
 *(depending on orifice)

Article Number	Product Descr.	Ø Orifice (mm)	Viscosity Range (cSt)	Flow times (sec)
VF2084	No 1	2.1	10-35	55-100
VF2085	No 2	2.8	25-120	40-100
VF2086	No 3	3.4	49-220	30-100
VF2087	No 4	4.1	70-370	30-100
VF2088	No 5	5.8	200-1200	30-100

* For information purposes only; all approximate values at 25 °C.

**Technical data:
(cont.)****Immersion Viscosity Cup Type TFR**Cup: Stainless steel, 103.5 cm³

Nozzle: stainless steel, fixed

Handle: stainless steel.

Complies with: ASTM D 1200

Weight: 279-282 gram*

Maximum Width: 63 mm

Cup height: 73 mm

Total height: 253 mm

*(depending on orifice)

Article Number	Product Descr.	Ø Orifice (mm)	Viscosity Range (cSt)*	Flow times (sec)*
VF2232	No 1	2.1	10-35	55-100
VF2233	No 2	2.8	25-120	40-100
VF2234	No 3	3.4	49-220	30-100
VF2235	No 4	4.1	70-370	30-100
VF2236	No 5	5.8	200-1200	30-100
* For information purposes only; all approximate values at 25 °C.				

Special care:

With reasonable care, a viscosity cup is constructed to give many years of satisfactory service. To clean the instrument, use a soft cloth, NEVER clean by any mechanical means, such as steel brushes, sandpaper or other abrasive tools. Particular care should be used in cleaning the orifice to avoid leaving deposits or scratches on internal surfaces. It's recommended to clean the cup promptly after each use, unless it will be used immediately for a rerun of the same material.

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 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.

