

**VISCOSITY CUPS ACCORDING TO ASTM D 1200 (FORD)**

VF2029, VF2030, VF2031, VF2032, VF2033, VF2041, VF2042

DATASHEET

**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**

ASTM D 1200. 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.

**SCOPE OF SUPPLY**

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

**ORDERING INFORMATION**

Article Number	Product Descr.	Ø Orifice (mm)	Viscosity Range (cSt) *	Flow times (sec)*	Material **
VF2029	No 1	1.9	10-35	55-100	Titanium anodized aluminum
VF2030	No 2	2.53	25-120	40-100	Titanium anodized aluminum
VF2031	No 3	3.4	49-220	30-100	Titanium anodized aluminum
VF2032	No 4	4.1	70-370	30-100	Titanium anodized aluminum
VF2033	No 5	5.2	200-1200	30-100	Titanium anodized aluminum
VF2041	No 1	1.9	10-35	55-100	Stainless steel
VF2042	No 2	2.53	25-120	40-100	Stainless steel

\* For information purposes only; all approximate values at 25 °C.      \*\* all cups have a stainless steel nozzle

**OPTIONAL ITEMS**

VF2034	Test certificate, type M, according to cup type Ford, ASTM D 1200.
VF2061	Tripod stand Type S40B, stainless steel ring incl. Spirit level
VF2062	Ring stand Type S 10
VF1980	S20 special stand design 2005
DI0076	Stopwatch Type C510 digital LCD-display, 9h. 59 min. 59,99 sec.

VF2053	Viscosity Conversion Disc
VF2067	Attenuation tank TM 1, for DIN- and ASTM Cups
VF2063	Glass sheet

## SPECIFICATIONS

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Max. Width:	92 mm
Height:	74 mm
Weight	196 g (titanium anodized aluminum) ; 557 g (stainless steel)

## USE

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- 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.
- Once the viscosity cup is truly horizontal (this is best achieved using a cup stand and bubble 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

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A viscosity cup is a precision instrument. With reasonable care, it 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 sandpaper, steel brush or any other abrasive tool. 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

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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

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The right of technical modifications is reserved.

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