



## Viscosity Cups according/similar to DIN 53211

**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:** According/similar to DIN 53211

**Application/ application area's:** Laboratory

**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.



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

**Optional items:**

- VF2005** Test certificate, type M, according to DIN 55350 part 18, for DIN viscosity cup with nozzle 4mm.
- VF2062** Ring stand Type S 10
- VF1980** S20 special stand design 2005
- VF1982** Optional attemperation tank type DIN and ASTM for S20 special stand
- VF2061** Tripod stand Type S40B, stainless steel ring incl. Spirit level
- D10076** Stopwatch Type C510 digital LCD-display, 9h. 59 min. 59,99 sec.
- VF2053** Viscosity Conversion Disc
- VF2067** Attemperation tank TM 1, for DIN- and ASTM-Cups

**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 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.

**Technical data**
**Viscosity Cup Type DE 10**

Cup: titanium anodized aluminium,  
100 cc  
 Nozzle: stainless steel, fixed  
 Acc. to: DIN 53211 (No. 4)  
 Other orifices sim. to DIN 53211  
 Weight 212-214 gram\*  
 Max. Width: 91 mm  
 Height: 74 mm  
 \*(depending on orifice)

Article Number	Product Descr.	Ø Orifice (mm)	Viscosity Range (cSt)	Flow times (sec)
VF2000	2	2		
VF2001	3	3		
VF1999	4	4	96-683	25-150
VF2002	5	5		
VF2003	6	6		
VF2004	8	8		

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

**Viscosity Cup Type DR 10**

Cup: stainless steel, 100 cc  
 Nozzle: stainless steel, fixed  
 Acc. to: DIN 53211 (No. 4)  
 Other orifices sim. to DIN 53211  
 Weight 603-606 gram\*  
 Max. Width: 91 mm  
 Height: 74 mm  
 \*(depending on orifice)

Article Number	Product Descr.	Ø Orifice (mm)	Viscosity Range (cSt)	Flow times (sec)
VF2013	2	2		
VF2014	3	3		
VF2015	4	4	96-683	25-150
VF2016	5	5		
VF2017	6	6		
VF2019	8	8		

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

**Special care**

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:**

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.