

VISCOSITY CUPS ACCORDING TO ASTM D 1200 (FORD)

VF2030, VF2031, VF2032, VF2033

PRODUCT DESCRIPTION

The Sheen Viscosity Cup ASTM D1200 Ford is a range of titanium anodized aluminum or stainless steel viscosity cups with fixed stainless steel nozzle (inner cavity). the viscosity cups are suitable for laboratory use with a stand. Widely used for measuring paint, lacquers and other liquids.

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

OPTIONAL ITEMS

CL0030	Calibration Certificate (if applicable)
VF2061	Tripod stand Type S40B, stainless steel ring incl. Spirit level
VF2062	Ring stand Type S 10
DI0076	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
VF2063	Glass sheet

SPECIFICATIONS

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

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.
- 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

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 right of technical modifications is reserved.

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VISCOSITY CUP ZAHN (IMMERSION)

VF2226, VF2227, VF2228, VF2229, VF2230

PRODUCT DESCRIPTION

The TQC Viscosity Cup ASTM D1084 D4212 Immersion Zahn is a range of stainless steel (SS303) viscosity cups with fixed stainless steel inner cavity nozzle and handle. Ideal for measuring coatings and other fluids during application or production.



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.

BUSINESS

Laboratory, manufacture

STANDARDS

Complies with: ASTM D 1084, D 4212. Look up the appropriate standard for a correct execution of the test.

FEATURES

- Each cup has a long 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.

SCOPE OF SUPPLY

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

ORDERING INFORMATION

VF2226	TQC Viscosity Cup ASTM D1084 D4212 Immersion Zahn Type: ZC, made of stainless steel, with fixed stainless steel nozzle, orifice No. 1
VF2227	TQC Viscosity Cup ASTM D1084 D4212 Immersion Zahn Type: ZC, made of stainless steel, with fixed stainless steel nozzle, orifice No. 2
VF2228	TQC Viscosity Cup ASTM D1084 D4212 Immersion Zahn Type: ZC, made of stainless steel, with fixed stainless steel nozzle, orifice No. 3
VF2229	TQC Viscosity Cup ASTM D1084 D4212 Immersion Zahn Type: ZC, made of stainless steel, with fixed stainless steel nozzle, orifice No. 4

VF2230 TQC Viscosity Cup ASTM D1084 D4212 Immersion Zahn
Type: ZC, made of stainless steel, with fixed stainless steel nozzle, orifice No. 5

ACCESSORIES

CL0030 Calibration Certificate (if applicable)
DI0076 Stopwatch Type C510 digital LCD-display, 9h. 59 min. 59,99 sec.
VF2053 Viscosity Conversion Disc

SPECIFICATIONS

Cup: stainless steel, 44.0 cm³
Nozzle: stainless steel, fixed
Handle: stainless steel.
Complies with: ASTM D 1084, ASTM D 4212
Weight: 135-137 gram*
Cup width: 36 mm
Cup height: 62.5 mm
Max. Width: 50 mm
Total height: 330 mm
*(depending on orifice)

Art. No	Product descr.	Ø Orifice (mm)	Viscosity Range * (cSt)	Flow Time* (sec)	Type of materials
VF2226	No 1	2.0	max. 60	35-80	Very thin liquids
VF2227	No 2	2.7	20-250	20-80	Thin oils, mixed paints, lacquers
VF2228	No 3	3.8	100-800	20-80	Medium oils, mixed paints, enamels
VF2229	No 4	4.3	200-1200	20-80	Viscous liquids and mixtures
VF2230	No 5	5.3	400-1800	20-80	Extr. Viscous liquids and mixtures

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

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.

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

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VISCOSITY CUP ISO 2431 DIP-TYPE

VF2090, VF2091, VF2185, VF2092, VF2093, VF2220, VF2222, VF2224

PRODUCT DESCRIPTION

The TQC Viscosity Cup ISO 2431 Immersion is a range of titanium anodized aluminum or stainless steel (SS303) viscosity cups with fixed stainless steel nozzle (inner cavity) and handle. Inner dimensions similar to ISO 2431. Ideal for measuring coatings and other fluids during application or production.

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/ similar to ISO 2431. Look up the appropriate standard for a correct execution of the test.

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.



SCOPE OF SUPPLY

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

ORDERING INFORMATION

Stainless steel

Article Number	Product Descr.	Ø Orifice (mm)	Viscosity* Range (cSt)	Flow times* (sec)	Material
VF2220	2	2			Stainless steel
VF2222	4	4	34-135	30-100	Stainless steel
VF2224	6	6	188-684	30-100	Stainless steel
VF2090	3	3	7-42	30-100	Titanium anodised aluminum
VF2091	4	4	34-135	30-100	Titanium anodised aluminum
VF2185	5	5	91-326	30-100	Titanium anodised aluminum
VF2092	6	6	188-684	30-100	Titanium anodised aluminum
VF2093	8	8	600-2000	30-100	Titanium anodised aluminum
			* For information purposes only; all approximate values at 25 °C.		

ACCESSORIES

CL0030	Calibration Certificate (if applicable)
DI0076	Stopwatch Type C510 digital LCD-display, 9h. 59 min. 59,99 sec.
VF2053	Viscosity Conversion Disc
TE0027	TQC Precision Thermometer

SPECIFICATIONS

Immersion Viscosity Cup Type TI:

Cup:	titanium anodized aluminium, 100 cc
Nozzle:	stainless steel, fixed
Handle:	stainless steel.
Comp. with:	ISO 2431 (3,4,5,6)
Weight:	281-282 gram*
Max. Width:	74 mm
Cup width:	64 mm
Cup height:	84 mm
Total height:	250 mm
	*(depending on orifice)

Immersion Viscosity Cup Type TFR:

Cup:	stainless steel, 100 cc
Nozzle:	stainless steel, fixed
Handle:	stainless steel.
Comp. with:	ISO 2431 (3,4,6)
Weight:	746-755 gram*
Max. Width:	74 mm
Cup width:	64 mm
Cup height:	84 mm
Total height:	250 mm
	*(depending on orifice)

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. 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.

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

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VISCOSITY CUP DIN 53211 DIP-TYPE

VF2071, VF2072, VF2073, VF2074, VF2075, VF2077, VF2213, VF2215, VF2216, VF2217

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.

BUSINESS

Laboratory, manufacture

STANDARDS

Compatible with/ similar to DIN53211. Look up the appropriate standard for a correct execution of the test.

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.

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)
VF2071	2	2		
VF2072	3	3		
VF2073	4	4	96-683	25-150
VF2074	5	5		
VF2075	6	6		
VF2077	8	8		

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



Article Number	Product Descr.	Ø Orifice (mm)	Viscosity Range (cSt)	Flow times (sec)
VF2213	2	2		
VF2214	3	3		
VF2215	4	4	96-683	25-150
VF2216	5	5		
VF2217	6	6		
VF2219	8	8		

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

ACCESSORIES

- VF2210 Test certificate, type M, according to cup type TA 4 mm, DIN 53211
 DI0076 Stopwatch Type C510 digital LCD-display, 9h. 59 min. 59,99 sec.
 VF2053 Viscosity Conversion Disc

SPECIFICATIONS

Immersion Viscosity Cup Type TA

Cup: titanium anodized aluminium, 100 cc
 Nozzle: stainless steel, fixed
 Handle: stainless steel.
 Comp. with: DIN 53211 (No. 4)
 Weight: 176-179 gram*
 Max. Width: 63 mm
 Cup height: 74 mm
 Total height: 250 mm
 *(depending on orifice)

Immersion Viscosity Cup Type TFR

Cup: stainless steel, 100 cc
 Nozzle: stainless steel, fixed
 Handle: stainless steel.
 Comp. with: DIN 53211 (No. 4)
 Weight: 447-450 gram*
 Max. Width: 63 mm
 Cup height: 74 mm
 Total height: 250 mm
 *(depending on orifice)

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. 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.

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

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