

Viscosity is a key parameter in the behavior of paints both during the manufacturing process and during application. Proper control of this parameter will result in a better use of the paint.

Likewise, knowledge of both the application method and application temperature is required when formulating the paint. Adequate viscosity control at low and high shear rates and assessment of any thixotropy are also necessary during mixing in order to avoid later undesirable effects during application.




Application


Calculation of the viscosity by measuring the time needed to flow through an orifice of specific characteristics (seconds).

The Cinematic Viscosity is the relation between the absolute viscosity and the density of a fluid. It is usually called ν , consequently $\nu = \mu/\rho$. Some of the units to express it are m^2/s , stoke (St) and centistoke (cSt), with the following equivalences: $1 \text{ m}^2/\text{s} = 10000 \text{ St} = 1 \times 10^6 \text{ cSt}$. Imagine two different fluids with the same absolute viscosity that flow vertically through an orifice. The fluid with the highest density will flow faster, i.e. the one with the lowest cinematic viscosity.

UNE ISO cup (UNE EN ISO 2431)


	Model	Order Code	Time (s)	Range (cSt)	Calibration Oils
	ISO 3	0201901	30-100	7-42	C20
	ISO 4	0201902	30-100	34-135	C60
	ISO 5	0201903	30-100	91-326	---
	ISO 6	0201904	30-100	188-684	C100
Optional: SER-CE034 ENAC Calibration Certificate for viscosity cups. Also, non-standard cups.					

FORD cup (ASTM D1200)

	Model	Order Code	Time (s)	Range (cSt)	Calibration Oils
	FORD 1	0201210	55-100	10-35	C10
	FORD 2	0201220	40-100	25-120	C20
	FORD 2 with Handle	0201050			
	FORD 3	0201230	20-100	49-220	C60
	FORD 3 with Handle	0201020			
	FORD 4	0201240	20-100	70-370	C60
	FORD 4 with Handle	0201000			
	FORD 5	0201250	20-85	200-1200	C200
	FORD 5 with Handle	0201010			
	FORD 6	0201270	non-stantard	---	---
	FORD 6 with Handle	0201030			
	FORD 8	0201280	non-stantard	---	---
	FORD 8 with Handle	0201040			


Optional: SER-CE034 ENAC Calibration Certificate for viscosity cups. Also, non-standard cups.

DIN cup (DIN 53211-85)




Model	Order Code	Time (s)	Range (cSt)	Calibration Oils
DIN 4	0201106	20-80	25-680	C60
DIN 4 with Handle	0201100			
DIN 6	0201107	non-stantard	---	---
DIN 6 with Handle	0201105			
DIN 8	0201108	non-stantard	---	---
DIN 8 with Handle	0201109			
Optional: SER-CE034 ENAC Calibration Certificate for viscosity cups. Also, non-standard cups.				

ZAHN cup (ASTM D4212)








Model	Order Code	Time (s)	Range (cSt)	Calibration Oils
ZAHN 1	0201806	20-80	5-60	C20
ZAHN 2	0201805		20-250	C60
ZAHN 3	0201803		100-800	C100
ZAHN 4	0201801		200-1200	C100
ZAHN 5	0201802		400-1800	C350
Optional: SER-CE034 ENAC Calibration Certificate for viscosity cups. Also, non-standard cups.				

AFNOR cup (NFT30-014)

	Model	Order Code	Time (s)	Range (cP)	Calibration Oils
	AFNOR 2,5	0201850	30 - 250	5 a 100	---
	AFNOR 4	0201851	20 - 300	50 a 1100	---
	AFNOR 6	0201852	30 - 300	510 a 5100	---
Optional: SER-CE034 ENAC Calibration Certificate for viscosity cups. Also, non-standard cups.					

Accessories

Calibration Oils				Tripod for cups		Cronometer	
							
	Model	Order Code	(cSt)				
	C10	0202507	17				
	C20	0202511	34				
	C60	0202510	120				
	C100	0202513	230	Order Code	SE-7001021	Order Code	SP-810035A
C200	0202514	460	Adjustable feet and bubble level		Timer / Hour / Alarm Range: 12/24 hrs. Resolution: 1/100seg		
Optional: SER-CE034 ENAC Calibration Certificate for viscosity cups. Also, non-standard cups.							

Viscosity Pattern		Tripod with automatic counter	
	<p>It is a double anodized aluminum jacket, with built-in bubble level. The jackets are perfect for tempering (with cold or hot liquids) the container with the product whose viscosity is to be tested.</p> <p>Two models are available:</p>		<ul style="list-style-type: none">- High-quality flow timer.- Suitable for various cup sizes and brands (DIN, ISO, FORD...).- Optical/contactless fluid detector.- Fast, precise, reproducible response time.- Automatic start/stop with drip detection.- Dynamic light compensation.- Comparison of flow time with previous measurement.- Automatic shutdown after 5 min.
References			
0201310	FORD / DIN thermal sleeve for viscose cups	References	
0204300	Thermal sleeve for ISO viscose cups		
Optional: SER-CE034 ENAC Calibration Certificate for Viscosity Cups.			