

Marsh Funnel

Product information



Viscosity

The marsh funnel viscometer is a simple device used for quick measurements of fluid viscosity.

Description

The marsh funnel is made of break-resistant plastic and has a fixed orifice with a specified diameter. A fixed mesh near the top across half the cone avoids the orifice getting blocked by greater particles. The high-impact plastic measuring cup is designed specifically for use with marsh funnel viscometer and has scales in cubic centimeter and fluid ounces.

The marsh funnel viscosity respectively the funnel flow time is the ratio of the speed of the sample fluid as it passes through the orifice to the amount of force that is causing the fluid to flow. The marsh funnel viscosity is reported as the number of seconds required for 1000 cm³ of sample fluid to flow out of a full marsh funnel.

Technical Specifications



Funnel

Height	:	370 mm	14.5"
Diameter	:	152 mm	6.0"
Capacity	:	1500 cm ³	0.4 gal
Weight	:	0.34 kg	0.75 lbs

Orifice

Inner diameter	:	approx. 4.76 mm	0.187"
		approx. 8 mm	0.315"
		approx. 10 mm	0.394"

Accessories

Cup

Height	:	135 mm	5.31"
Diameter	:	130 mm	5.12"
Capacity	:	1000 cm ³	0.26 gal
Weight	:	0.215 kg	0.47 lbs

Stand

Height	:	510 mm	20.08"
Diameter base plate	:	200 mm	7.87"
Weight	:	1.5 kg	3.31 lbs

Operation

1. Hold the clean, dry funnel in an upright position with a finger over the outlet, then pour the freshly obtained sample of the fluid to be tested through the mesh until the fluid level reaches the bottom of the mesh (approx. 1500 cm³).
2. Quickly remove the finger from the outlet. Measure the time it takes the fluid to fill to the 1000 cm³ mark of the cup.
3. Measure the temperature of the fluid.
4. Report the temperature of the fluid and the time to the nearest second as marsh funnel viscosity.

The marsh funnel is calibrated so that 1 liter (1000 cm³) of fresh water at a temperature of $20 \pm 3^{\circ}\text{C}$ should outflow from the orifice in

Diameter 4.76 mm	:	28.0 ± 0.5 seconds
Diameter 8 mm	:	9.2 ± 0.5 seconds
Diameter 10 mm	:	6.0 ± 0.5 seconds.

Maintenance

The marsh funnel is maintenance free. Clean and dry the marsh funnel after each use and ensure proper storage when not in use.

Order Information

Funnel 4.76 mm	8030.0000020100
Funnel 8 mm	8030.2000020100
Funnel 10 mm	8030.1000020100
Measuring cup 1000 cm ³	8030.0000020200
Stand with base plate	7200.99.0200090
Stop watch	9000.00.3490600
Thermometer -20°C to 60°C	9000.00.3899100

