

Zahn-Type Dip Cups

Viscosity Cups

BYK-Gardner Dip Viscosity Cups (Zahn Type) may be used anywhere – in shops, factories and laboratories – for quickly checking and adjusting the viscosity of many different types of liquids.

- Simple and durable
- Range from about 20 to 1800 centistokes
- Precision-drilled orifices
- Orifice diameters adjusted at the factory for appropriate results with applicable NIST traceable Newtonian oils

Each cup has a 12-inch loop handle to allow the cup to be dipped by hand into a liquid container. At the center of this handle is a finger-ring for holding the cup in a vertical position during use. Results should be reported in Zahn-Seconds at a specified temperature for a particular cup. To convert Zahn-Seconds to centistokes, refer to ASTM D 4212.



$$\text{Centistokes} \times \text{Specific Gravity} = \text{Centipoise}$$

$$\text{Centistokes} = K * (\text{efflux time} - C)$$

	Conversion Factors	K	C
Cup# 1		1.1	29
Cup# 2		3.5	14
Cup# 3		11.7	7.5
Cup# 4		14.8	5
Cup# 5		23	0

Standards

ASTM D 816, D 1084, D 4212

Ordering Information

Cat. No.	Description	Cat. No. with Certificate	Range in Centistokes	Seconds Range
8201	Zahn Type Cup No.1	8206	Centistokes	20 - 84
8202	Zahn Type Cup No.2	8207	30 - 230	22 - 80
8203	Zahn Type Cup No.3	8208	150 - 830	20 - 80
8204	Zahn Type Cup No.4	8209	230 - 1100	20 - 80
8205	Zahn Type Cup No.5	8210	460 - 1800	20 - 78

Net Weight 0.2 kg (0.4 lbs)

Shipping Weight 0.4 kg (1 lbs)

Zahn-Type Dip Cups

BYK-Gardner offers the EZ™ and Signature™ brand Zahn cups. These cups are also widely used for many industrial applications.

S90 Signature Cups

Ordering Information

Cat. No.	Description	Cat. No. with Certificate	Range in Centistokes	Seconds Range
S90 Signature Series Zahn Cups				
6919	S90 Zahn Cup No.1	8300	15 - 78	31 - 60
2102	S90 Zahn Cup No.2	8301	39 - 238	19 - 60
2103	S90 Zahn Cup No.3	8302	63 - 604	11 - 60
2104	S90 Zahn Cup No.4	8303	97 - 899	10 - 60
6920	S90 Zahn Cup No.5	8304	219 - 1627	10 - 60

Note: Efflux time from the S90 cups does not meet ASTM D4212

$$\text{Centistokes} = K * \text{efflux time} - (C / \text{efflux time})$$

	Conversion Factors	K	C
Cup# 1		1.59	1070
Cup# 2		4.18	760
Cup# 3		10.23	575
Cup# 4		15.13	545
Cup# 5		27.27	540

EZ Series Zahn Cups

■ In compliance with ASTM D 4212

Ordering Information

Cat. No.	Description	Cat. No. with Certificate	Range in Centistokes	Seconds Range
EZ Series Zahn Cups				
2106	EZ Zahn Cup No.1	8305	10 - 36	40 - 60
2107	EZ Zahn Cup No.2	8306	19 - 156	20 - 60
2108	EZ Zahn Cup No.3	8307	64 - 596	12 - 60
2109	EZ Zahn Cup No.4	8308	79 - 784	10 - 60
6922	EZ Zahn Cup No.5	8309	161 - 1401	10 - 60

$$\text{Centistokes} = K * \text{efflux time} - (C / \text{efflux time})$$

	Conversion Factors	K	C
Cup# 1		0.875	993
Cup# 2		2.8	747
Cup# 3		10.09	587
Cup# 4		13.26	673
Cup# 5		23.56	744