

TE-DPV Asphalt is an automated, thermoelectrically cooled rotational digital dual paddle viscometer for measuring the dynamic viscosity of emulsified asphalts at 25 °C, 40 °C, 50 °C, 60 °C, and 70 °C.

The TE-DPV Asphalt provides a convenient, automated alternative to older, labor-intensive and less precise methods.

#### Common Applications

- Emulsified asphalts
- Marine fuels
- Suspensions
- Slurries
- Residual oils

# TE-DPV<sup>®</sup> Asphalt Thermoelectric Rotational Paddle Viscometer

For Dynamic Viscosity of Emulsified Asphalts  
ASTM D7226, ASTM D2397, ASTM D977 and AASHTO T 382

#### Designed specifically for viscosity testing of emulsified asphalt

- Meets ASTM D7226, D2397, D977, and AASHTO T 382 for asphalt emulsions
- Viscosity range: 30 mPa·s (cP) to 3,000 mPa·s (cP), ±5% accuracy
- Integrated heating and cooling enables dynamic viscosity measurement at 25 °C, 40 °C, 50 °C, 60 °C, 70 °C (±0.1°C); CANNON<sup>®</sup> factory calibrated at 50 °C
- Digital display presents viscosity values in mPa·s (cP) as well as mm<sup>2</sup>/s (cSt) for samples with known density values

#### Improves data quality

- Automated sample processing and testing reduces the impact of operator on data quality
- Dual paddles continuously mix the sample for greater homogeneity and more representative data
- Direct temperature measurement of sample, rather than the bath, improves measurement accuracy and results
- Viscosity data is automatically calculated and may be transferred to an optional dot matrix printer

#### Eliminates laborious and tedious methodologies

- Simply load the sample and push a button to initiate testing
- Removable sample cup makes cleaning between samples quicker and easier
- Unattended sample processing saves time and labor
- Completes most tests in 10 to 30 minutes

#### Reduces safety risks

- No hot dripping sample; no glass components or accessories
- Wipe-clean paddles and sample cup reduce the need to use hazardous cleaning solvents
- Heater cup thermostat senses over-temperature fault conditions and removes power until temperature reaches a safe level
- Motor shaft and paddle immobilization automatically cut off motor power

#### Low cost, easily transportable design

- Self-contained, compact instrument requires no ancillary equipment
- At ½ the benchtop footprint and ½ the weight of traditional Saybolt viscometer baths, the TE-DPV Asphalt conserves valuable lab space and transports easily for field applications



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# TE-DPV® Asphalt | Thermoelectric Rotational Paddle Viscometer

## Ordering Information

The CANNON® TE-DPV Asphalt Thermoelectric Rotational Paddle Viscometer consists of the viscometer with adjustable heated tray assembly and head unit, two reusable sample cups, two sample paddles, and one N750 viscosity standard. Optional printer sold separately.

Description	Part #
100 VAC to 240 VAC, 47 to 63 Hz	9725-F72

## Accessories & Consumables

Description	Part #
Replacement sample cup	17.4003
Replacement sample cup (case of 300)	17.4210
Replacement sample paddle	17.4004
N750 oil viscosity standard (500 mL)	9727-C51.016
Compact dot matrix impact printer	82.0067

## Product Specifications

Dimensions (W x D x H)	23.5 cm x 27.3 cm x 45.1 cm (9.3 in x 10.8 in x 17.8 in) <i>15 cm (6 in) rear clearance required</i>
Weight	10.0 kg (22.0 lb)
Shipping dimensions (W x D x H)	38.1 cm x 40.6 cm x 53.3 cm (15.0 in x 16.0 in x 21.0 in)
Shipping weight (with all items)	16.3 kg (36.0 lb)
Max throughput	2 to 4 samples per hour
Automated sample capacity	1
Viscosity range & accuracy	30 mPa·s (cP) to 3,000 mPa·s (cP) ±5%
Test temperatures & accuracy	25 °C, 40 °C, 50 °C, 60 °C, 70 °C ±0.1°C <i>factory calibrated at 50 °C</i>
Minimum sample volume	135 mL per test
Operating conditions	15 °C to 30 °C, 10% to 75% relative humidity (non-condensing), Installation Category II; Pollution Degree 2
Electrical specifications	100 VAC to 240 VAC, 47 to 63 Hz; 120 watts power consumption
Compliance	CE Mark; EMC directive (2004/108/EC); Low voltage directive (2006/95/EC); HI-POT (1900 VDC, 60 sec.); ROHS
Data output	RS-232



CANNON Instrument Company® provides a variety of physical property testing equipment and consumables (vials, bath fluids, and reference materials) for your testing needs. To learn more, contact [sales@cannoninstrument.com](mailto:sales@cannoninstrument.com).



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