



## SAYBOLT VISCOSITY

### Saybolt Viscometer Tubes and Orifices

- Conforming to ASTM D88, E102 and related specifications
- Choice of brass or stainless steel tubes

**Viscometer Tubes**—Precisely machined brass and stainless steel tubes meeting ASTM requirements. Tubes mount vertically in Saybolt Viscometer Baths and accommodate stainless steel orifices interchangeably. Supplied with mounting hardware.



**Orifices**—Stainless Steel Universal and Furol Orifices meeting ASTM specifications. Orifices insert in viscometer tubes using K22030 Orifice Wrench (supplied with viscometer baths). Also available - Kansas Road Oil Orifice (requires K22039 wrench). Universal and Furol Orifices are available with a calibration certificate.

### Ordering Information

#### Catalog No.

#### Viscometer Tubes

- K22009** Saybolt Viscometer Tube, Brass  
**K22309** Saybolt Viscometer Tube, Stainless Steel

#### Orifices

- K22010** Saybolt Universal Orifice  
**K22010-C/F** Saybolt Universal Orifice with calibration certificate  
**K22020** Furol Orifice  
**K22020-C/F** Saybolt Furol Orifice with calibration certificate  
**K22029** Kansas Road Oil Orifice

#### Accessories

- 332-003-003** Borosilicate Glass Receiving Flask, 60mL for SV3000  
**332-003-014** Borosilicate Glass Receiving Flask, 60mL for SV4000  
**K22030** Orifice Wrench for Universal and Furol Orifices  
**K22039** Orifice Wrench for Kansas Road Oil Orifices  
**K22050** Socket Wrench  
**K22060** Oil Strainer  
**K22070** Cleaning Plunger  
**K22080** Displacement Ring. Insert in viscometer tube galley for bituminous materials testing. Meets ASTM E102 specifications.  
**K22090** Withdrawal Tube  
**K22011** Thermometer Support

## SAYBOLT VISCOSITY THERMOMETERS

| Catalog Number | Thermometer | Test Temperature |               | Range        |
|----------------|-------------|------------------|---------------|--------------|
|                |             | °F               | °C            |              |
| 250-000-17F    | ASTM 17F    | 66 to 80°F       | —             | 66 to 80°F   |
| 250-000-17C    | ASTM 17C    | —                | 19 to 27°C    | 19 to 27°C   |
| 250-000-18F    | ASTM 18F    | 100°F            | —             | 94 to 108°F  |
| 250-000-18C    | ASTM 18C    | —                | 34 to 42°C    | 34 to 42°C   |
| 250-000-19F    | ASTM 19F    | 122 and 130°F    | —             | 120 to 134°F |
| 250-000-19C    | ASTM 19C    | —                | 50 and 54.4°C | 49 to 57°C   |
| 250-000-20F    | ASTM 20F    | 140°F            | —             | 134 to 148°F |
| 250-000-20C    | ASTM 20C    | —                | 60°C          | 57 to 65°C   |
| 250-000-21F    | ASTM 21F    | 180°F            | —             | 174 to 188°F |
| 250-000-21C    | ASTM 21C    | —                | 82.2°C        | 79 to 87°C   |

| Catalog Number | Thermometer | Test Temperature |        | Range        |
|----------------|-------------|------------------|--------|--------------|
|                |             | °F               | °C     |              |
| 250-000-22F    | ASTM 22F    | 210°F            | —      | 204 to 218°F |
| 250-000-22C    | ASTM 22C    | —                | 98.9°C | 95 to 103°C  |
| 250-000-77F    | ASTM 77F    | 250°F            | 121°C  | 245 to 265°F |
| 250-000-108F   | ASTM 108F   | 275°F            | 135°C  | 270 to 290°F |
| 250-000-78F    | ASTM 78F    | 300°F            | 149°C  | 295 to 315°F |
| 250-000-109F   | ASTM 109F   | 325°F            | 163°C  | 320 to 340°F |
| 250-000-79F    | ASTM 79F    | 350°F            | 177°C  | 345 to 365°F |
| 250-000-80F    | ASTM 80F    | 400°F            | 204°C  | 395 to 415°F |
| 250-000-81F    | ASTM 81F    | 450°F            | 232°C  | 445 to 465°F |

*For NIST traceable certified thermometers, please refer to the ASTM Thermometer section on pages 184 through 191.*

#### Test apparatus for lubricants, insulating oils, and heater fuel grades:

| Catalog No. |   | Order Qty |
|-------------|---|-----------|
| K21410      | Saybolt Viscometer Bath                             | 1         |
| K22009      | Viscometer Tube                                     | 4         |
| K22010      | Universal Orifice                                   | 4         |
| 332-003-003 | Receiving Flask (SV3000)                            | 4         |
| 332-003-014 | Borosilicate Glass Receiving Flask, 60mL for SV4000 | 4         |
| 355-001-001 | White Technical Oil                                 | 5         |
| 250-000-17F | Series ASTM Thermometers or                         |           |
| 250-000-17C | Series ASTM Thermometers                            |           |

#### Test apparatus for bituminous materials:

| Catalog No. |   | Order Qty |
|-------------|---|-----------|
| K21410      | Saybolt Viscometer Bath                             | 1         |
| K22009      | Viscometer Tube                                     | 4         |
| K22020      | Furol Orifice                                       | 4         |
| K22080      | Displacement Ring                                   | 4         |
| 332-003-003 | Receiving Flask (SV3000)                            | 4         |
| 332-003-014 | Borosilicate Glass Receiving Flask, 60mL for SV4000 | 4         |
| 355-001-002 | High Temperature Heat Transfer Fluid                | 5         |
| 250-000-17F | Series ASTM Thermometers or                         |           |
| 250-000-17C | Series ASTM Thermometers                            |           |