

### Pour Point of Crude oils - Procedure B

ASTM D5853 - IP 441



- ⊕ **Stainless steel bath**
- ⊕ **Cooling coil**
- ⊕ **Bath drain**
- ⊕ **Easy to operate**
- ⊕ **Position for 6 test cylinders (9 optional)**

Item	Unit	TC16
P/N 230V/50-60Hz		31T0671
P/N 115V/60Hz		31T0861
Power	[kW]	1.5
Range	°C °F	Ambient .. 250 Ambient ..482
Reading		°C or °F
Setting	[°]	0.1
Stability	[°C]	0.02
Heating	[kW]	1.4
Bath volume	[L]	16
Bath opening	[mm]	6 x ø51 mm (9 x ø51 optional)
Bath depth	[mm]	220
Length	[mm]	480
Width	[mm]	295
Height	[mm]	480
Materials	Used inside bath: stainless steel 304, brass	
CE	Conforms to CE regulation	

#### General

The test method covers the determination of the pour point temperatures of crude oil down to -36°C. This specification sheet covers the baths needed for this test method to preheat the sample. Tamson also supplies a single adjustable pour point bath. Please see the separate D97 and D2500 specification sheet.

The TC16 oil bath is used to preheat the sample in the pressure vessel at 105°C. The cover of the oil bath has six openings, each opening comes with a lid and hook for suspending a pressure vessel (P/N 14T0100). The temperature range is from ambient +5°C to 250°C. Please see table 1 for more information. Accessories for this test are also supplied by Tamson, please see table 2. Optional is a cover with nine openings to test up to nine samples (P/N 03T2311), please see table 3.

For procedure A and B, an additional TC16 water bath as in table 1 can be used to preheat the sample in a pour point jar at 48°C or at a temperature 12°C higher than the expected pour point, whichever is higher. Please see table 4 for the required accessories.

#### Accuracy

The insulation of the bath and electronic design result in a very stable working temperature of  $\pm 0.02^\circ\text{C}$ . The set point can be set in steps of  $0.1^\circ\text{C}$  in the range of  $0^\circ\text{C}$  up to  $250^\circ\text{C}$  ( $-148..482^\circ\text{F}$ ). The accuracy on the display is displayed in  $0.1^\circ\text{C}$ . However the controller has an internal accuracy of  $0.01^\circ\text{C}$ .

#### Temperature readout

Standard available in  $^\circ\text{C}$ , on request in  $^\circ\text{F}$ .

#### Pump

When not used for pour point determinations, the pump can be used to circulate the bath content to an external application.

#### Safety

The bath conforms to CE regulation. It is further equipped with a mechanical resettable safety thermostat. Optional is a low liquid float (P/N 07T0080).

#### Alternative

We also offer a TC40 bath with a cover for 18 positions (P/N 03T2313). Please see table 5

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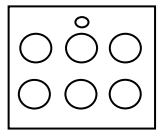








Table 1: Apparatus P/N 31T0671 or P/N 31T0861 standard consists of:			
P/N	Picture	Quantity	Description
00T0671		1	TC16 circulator bath, 230V/50-60Hz
00T0861			TC16 circulator bath, 115V/60Hz
13T8000		1	Top lid with six ø51 mm openings and a thermometer opening
14T0101		6	Lid and mounting hook

Table 2: Accessories for Pour Point of Crude Oil Procedure B			
P/N	Picture	Suggested quantity	Description
14T0100		6	Pressure vessel (test cylinder with o-ring). Cylinder is supplied with works certificate.
08T0001		1	Bath fluid silicon oil 20..150°C 20ltr
25T0908BW		1	ASTM thermometer similar to 9C with blue filling (low-hazardous to ship). Temp. range -5°C - +110°C:0.5°C. Supplied with works certificate.
31T0423		1	Cork for bath thermometer, pack of ten pieces
24T0385		6	O-ring for test cylinder (P/N 14T0100)




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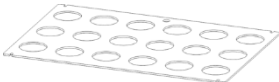

**Table 3: Optional for ASTM D5853 Procedure B**

P/N	Picture	Suggested quantity	Description
03T2311		1	Top lid with nine $\varnothing$ 51 mm openings. Please separately order 3 * P/N 14T0101 additionally.
14T0101		3	Lid and mounting hook for P/N 03T2311

**Table 4: Required accessories for water bath for procedures A and B**

P/N	Picture	Suggested quantity	Description
14T0109		6	Test tube holder test jar conform ASTM D5853
31T0012		6	Test jar ASTM D5853
31T0013		1	Vented cork for test jar (P/N 31T0012). 10 pieces.

**Table 5: Alternative apparatus for 18 positions**

P/N	Picture	Quantity	Description
00T0681		1	TC40 230V/50-60Hz
00T0851			TC40 115V/60Hz
03T2313		1	Cover with 18 * $\varnothing$ 51 mm openings
14T0101		18	Lid + mounting hook; number of pieces to be ordered separately, depending on number of test cylinder used