

### Volatility or Residue of Liquefied Petroleum Gases

ASTM D1837 – ASTM D2158



- ⊕ Drain to empty bath
- ⊕ Wheels fitted for easy transport
- ⊕ Compact, low noise
- ⊕ Auto tune, high precision

#### General

This test method is a measure of the relative purity of the various types of liquefied petroleum (LP) gases and helps to ensure suitable volatility performance. The Tamson D1837 apparatus is used to cool down the sample and hold the weathering tube in a vertical position. The TCC-B D1837 is a single and adjustable circulator bath with position for one cooling coil. A cover with lid is in the scope of supply. Tamson is also supplying a liquid bath to keep the sample between 15 °C to 21 °C, please see table 3.

#### Cooling medium

The used cooling system is ozone friendly and doesn't contain any CFK/HCFK gas.

#### Control mechanism

With the compressor running continuously, the fluid temperature is regulated through an electronic controlled heater.

#### Span

The TCC-B operates from -85°C to +20°C (-121°F to +68°F).

Item	Unit	TCC-B D1837	
P/N 230V/50Hz		00T0315	
P/N 230V/60Hz		00T0316	
P/N 115V/60Hz		N.A.	
Power	[Watt]	2600 max	
Used materials inside bath		Stainless steel Chrome plated coil	
Range		-85..+20°C -121..+68°F	
Reading	[°C/°F]	°F on request	
Setting ±	[°]	0.1	
Stability ±	[°C]	Better than 0.1	
Heating	[kW]	1.4 (1 heater)	
Bath volume	[L]	13	
Pump pressure	[mBar]	1000 max	
Pump cap	[L/min]	16 max	
Compressor	[W]	2*400	
Heat removal	[W]	@-64°	400
	[W]	@-73°	350
	[W]	@-82°	300
	[W]	@-84°	250
Opening bath	[mm]	175 x 130	
Depth bath	[mm]	320	
Length	[mm]	770	
Width	[mm]	380	
Height	[mm]	900	
Weight	[kg]	76	
CE		Conforms to CE regulation	

#### Accuracy

The set point is adjustable in steps of 0.1°. The overall system accuracy is better than ± 0.1°C. The temperature readout is standard available in °C, on request in °F.

#### Pump

A pressure pump provides circulation in the bath or via an external circuit. The pump pressure is 1000 mBar and 16 liters per minute. With the TCC-B, the pump speed can be adjusted.

#### Safety

The bath conforms to CE regulations. It also is equipped with a mechanical adjustable and resettable safety thermostat to guarantee safe around the clock operation.

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**Table 1: Necessary accessories for ASTM D1837 TCC-B**

P/N	Picture	Quantity	Description
31T0330		1	Cooling coil—Approximately 6 m (20 ft) of 4.8 mm (3/16 in.) outside diameter soft copper tubing
31T0339		1	Needle valve 1/4 inch 6.4
31T0340		1	Needle valve 1/8 inch 3.2
31T0342		2	Coupling 3/6 inch OD x 1/4 inch
31T0343		2	Coupling 3/6 inch OD x 1/8 inch

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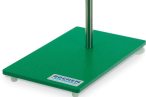



#### ASTM D1837 – ASTM D2158

Table 2: Accessories D1837 / D2158				
P/N	Picture	D1837	D2158	Description
09T0016		1	1	Weathering tube 100 ML D1837
31T0332			1	2 ml Syringe
31T0333			1	Needle 8 inch / 203 mm
31T0334		1		Barometer
31T0335			1	Filter paper grade 42 110mm dia, 100 pcs
31T0336		1		Charcoal
31T0337			1	Cork for D2158
31T0338		1		Cork for D1837.
31T0341		1	1	Copper coil 5 M 3/16" x 0,76 MM
25T0904B		1	1	ASTM S5C thermometer with special low-hazardous filling and works certificate with at 0°C.
25T0944B		1	1	ASTM 57C thermometer with special low-hazardous filling and conformity certificate.
25T0974BA		1		Armored thermometer similar to ASTM 99C with special low-hazardous filling and works certificate at 100°C.
31T0331			1	Copper wire D2158 1.59mm DIA 30M

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Table 3: Waterbath with accessories

P/N	Picture	Quantity	Description
00T0565		1	TLC15-5 230V/50Hz
00T0567			TLC15-5 230V/60Hz.
00T0570			TLC15-5 115V/60Hz.
24T0082		1	Stand plate
24T0083		1	Stand rod
24T0072		1	Double boss head rectangular
24T0073		1	Cooler clamp for stand-rod

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