Tamson Instruments Specification sheet

Corrosiveness to Copper from Industrial Aromatic Hydrocarbons

ASTM D849



\oplus	Stainless steel bath
Φ	Cooling coil
Φ	Bath drain
Φ	Easy to operate
Φ	Six positions
Φ	Delivered with six sets of glassware

General

The ASTM D849 test method covers the detection of the corrosiveness to copper from aromatic hydrocarbons. The apparatus consists of a six position TC40 circulator bath and it is standard delivered with six sets of glassware (250 mL flask and condenser). The cover of the bath has six openings, each with a lid and stand-rods with clamps to hold the glassware in the same position. The temperature range is from ambient +5°C to 250°C. All accessories for this test method are supplied by Tamson, please see table 2.

Accuracy

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

Temperature readout

Standard available in °C, on request in °F.

Item	Unit	TC40		
Apparatus D849 TC40 with glassware 230V/50-60Hz		00T2015		
Apparatus D849 TC40 with glassware 115V/60Hz		00T2016		
Power	[kW]	3.0		
Range	°C ∘F	Ambient 250 Ambient482		
Reading		°C or °F		
Setting	[°]	0.1		
Stability	[°C]	0.02		
Heating	[kW]	2.8		
Bath volume	[L]	40		
Bath openings	[mm]	6		
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			

Pump

When not used for copper corrosion tests, 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).



Rev 1.0 - "18

Tamson Instruments Specification sheet

Corrosiveness to Copper from Industrial Aromatic Hydrocarbons

Table 1: Apparatus ASTM D849 P/N 00T2015 or P/N 00T2016 consists of the following parts: P/N **Picture** Description Quantity 00T0681 TC40 circulator bath, 230V/50-60Hz. 1 00T0851 TC40 circulator bath, 115V/60Hz 07T0211 1 Levelling platform for TC40 03T2011 1 Top cover ASTM D849 with six openings 03T2012 6 Small lid for top cover (P/N 03T2011) Glass condenser for ASTM D849, 300 mm height with NS 31T2011 6 29 connection 31T2012 6 Flask (250 mL) with flat bottom with NS 29 connection 24T0072 6 Double boss head cross with brass clamping screws 24T0073 6 Cooler clamp for stand-rod 24T0068 2 Stand-rod

Apparatus for ASTM D849



Tamson Instruments Specification sheet

- 8

Corrosiveness to Copper from Industrial Aromatic Hydrocarbons

	lable	2: Accessorie	es for ASTM D849
Item	Picture	Suggested quantity	Description
31T0003		1	ASTM copper strip corrosion test standard.
31T0007	1	30	Copper strip with hole (per one strip) 12.5 x 3.0 x 75 n (W x thick x L) 99.9 % purity.
31T0000		1	Multistrip vise, holds up to four strips while polishing.
31T0005	Ö	1	Silicon carbide powder 105 µm (1kg).
09T0011	Zimson	6	Flat viewing test tube.
08T0001	City Martine Supported	2	Bath fluid silicon oil 20150°C 20 ltr.
25T0928BW		1	ASTM thermometer similar to 34C with blue filling (lo hazardous to ship). Temp. range +25°C-105°C:0.2°C Supplied with works certificate.
25T2154		1	Thermometer holder, 425 x 10 mm.
31T0009.100		1	Sanding paper silicon carbide P240 (box of 100 piece
31T0320		1	Soft copper. 99.9% purity. 0.5 mm. Rol of 30 m.

Accessorries for ASTM D849

