Corrosiveness to Copper from Petroleum Products

ASTM D130 - EN/ISO 2160 - IP 154 - DIN 51811 - ASTM D4048 - IP 112 - ASTM D7095



Item	Unit	TC16		
P/N 230V/50-60Hz		31T0671		
P/N 115V/60Hz		31T0861		
Power	[kW]	1.5		
Range	°C ∘F	Ambient 250 Ambient482		
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			

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

General

The test method covers the detection of the corrosiveness to copper of aviation gasoline, aviation turbine fuel, automotive gasoline, natural gasoline or other hydrocarbons having a Reid Vapour Pressure no greater than 18 psi. The cover of the bath has six openings, each with a lid and hook for suspending a copper corrosion test vessel (P/N 14T0100). Or the openings can accommodate test tubes in holders (P/N 14T0102). The temperature range is from ambient +5°C to 250°C. Optional is a cover with nine openings=s to test nine samples (P/N 03T2311).

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.

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 floater (P/N 07T0080).



Alternative

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

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Table 1: Apparatus P/N 31T0671 or P/N 31T0861 standard consists of:						
P/N	Picture	Quantity	Description			
00T0671			TC16 circulator bath, 230V/50-60Hz			
00T0861		I	TC16 circulator bath, 115V/60Hz			
13T8000	000 000	1	Top lid with six ø51 mm openings and a thermometer opening			
14T0101	3	6	Lid and mounting hook			

Table 2: Optional for ASTM D130						
P/N	Picture	Suggested quantity	Description			
03T2311	6333	1	Top lid with nine ø51 mm openings. Please seperately order 3 * P/N 14T0101 additionaly.			
14T0101	3	3	Lid and mounting hook for P/N 03T2311			
07T0080		1	Float/level detector			

	Table 3: Accessories for corrosion tests						
	P/N	Picture	Description				
	14T0100		Pressure vessel for copper strip corrosion test (test cylinder with o-ring). Cylinder is supplied with works certificate.				
2	31T0003		ASTM copper strip corrosion test standard.				
C	31T0002		Copper strip (per one strip) 12.5 x 3.0 x 75 mm (width x thick x length) 99.9 % purity.				



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Accessories

	Table 3: Accessories for corrosion tests P/N Picture Description						
	F/IN	Ficture	Description				
	31T0001		Sanding paper silicon carbide P220				
09T0010		5	Test tube 25 x 150mm				
	14T0102		Test tube (25 x 150 mm) holder				
	31T0000		Multistrip vise, holds up to four strips while polishing				
	31T0005 09T0011 Tamson		Silicon carbide powder 105 µm (1 kg)				
			Flat viewing test tube				
	08T0001		Bath fluid silicon oil 20150°C 20ltr				
	25T0928BW		ASTM thermometer similar to 34C with blue filling (low- hazardous to ship). Temp. range +25°C-105°C:0.2°C. Supplied with works certificate.				
	25T2154		Thermometer holder, 425 x 10mm				
	31T0008		Vented stopper made from silicon rubber for test tube (P/ 09T0010). 25 pieces. Width 24 (top) to 18 (bottom) mm Length 30 mm. Hole of 4 mm. Temperature resistant fro -60 to +180°C.				



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Accessories

	Table 3: Accessories for corrosion tests					
P/N	Picture	Description				
31T0009		Sanding paper silicon carbide P240				
24T0385		O-ring for test cylinder (P/N 14T0100)				
31T0010		Disposable copper foil strip for ASTM D7095 (one piece)				
31T0011		Scourcing pad 400 grit				
14T0109		Test tube holder test jar conform ASTM D4048				
31T0012	amson	Test jar ASTM D4048				
31T0013		Vented cork for test jar (P/N 31T0012). 10 pieces.				
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Accessories

	Table 4: Suggested accessories						
P/N	P/N Description		Suggested quantity	IP 112, ASTM D4048	Suggested quantity	ASTM D7095	Suggested quantity
14T0100	Test vessel with o-ring	0	6			0	6
31T0003	Test standard	0	1	0	1	0	1
31T0002	Copper strip	0	20	0	20		
31T0001	Sanding paper P220	0	20				
09T0010	Test tube 25 x150mm	0	20			0	20
14T0102	Test tube holder	0	6			0	6
31T0005	Silicon carbide powder	0	1	0	1		
31T0000	Multistrip vise	0	1	0	1	0	1
09T0011	09T0011 Flat glass viewing testtube		6	0	6	0	6
25T0928BW	BBW Thermometer similar to ASTM 34C		1	0	1	0	1
08T0001	Bath fluid silicon oil 20-150°C			0	1		
25T2154	25T2154 Thermometer holder		1	0	1	0	1
31T0009	Sanding paper P240			0	20		
31T0008	Vented cork for test tube	0	1	0	1	0	1
24T0385 O-ring for test vessel (P/N 14T0100)		0	6			0	6
31T0011 Scourcing pad 400 grit						0	1
31T0010	31T0010 Disposable copper foil strip					0	20
14T0109	Test jar holder ASTM D4048			0	6		
31T0012	Test jar ASTM D4048			0	20		
31T0013	Vented cork for test for ASTM D4048			0	20		

[Table 5: Alternative setup offering 18 positions (instead of 6)						
	P/N	Picture	Quantity	Description				
	00T0681		1	TC40 230V/50-60Hz				
	00T0851			TC40 115V/60Hz				
	03T2313		1	Cover with 18 * ø 51 mm openings				
	14T0101	5	18	Lid + mounting hook; number of pieces to be ordered separately, depending on number of test cylinder used				

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