# COPPER STRIP CORROSION BY LIQUEFIED PETROLEUM (LP) GASES

### **Test Method**

Tests the corrosiveness of LPG to copper by immersion of a polished test strip in the sample inside a test cylinder at elevated temperature. After one hour the test strip is removed and compared against the ASTM Copper Strip Corrosion Standards.

## **LPG Copper Strip Corrosion Test Apparatus**

- Conforms to ASTM D1838 and related specifications
- Four-sample testing capability

Consists of LPG Corrosion Test Cylinders, Water Bath, Copper Strips, Polishing Materials and the ASTM Copper Strip Corrosion Test Standards.

**LPG Corrosion Test Cylinders**—Stainless steel cylinder with ¼" needle valves for purging and admitting LPG samples. Dip tube with hook suspends copper strip in sample. Knurled, threaded cap with 0-ring gasket hand tightens to a positive seal. Withstands hydrostatic test pressure of 1000 psig (6895kPa).

**LPG Corrosion Test Water Bath**—Thermostatically controlled water bath submerges four LPG Corrosion Test Cylinders in an upright position. Controls temperature at  $100 \pm 1^{\circ}F$  (37.8  $\pm 0.5^{\circ}C$ ) per ASTM specifications. Soxhlet reflux condenser and constant water level device maintain proper working depth. Polished stainless steel inner wall and powder coated steel outer wall construction. Fully insulated.

Ordering Information		
Catalog No. K40000 K39900		r Qty 4
K39990	115V 60Hz LPG Corrosion Test Water Bath, 220-240V 50/60Hz	1
K40200	Accessories Copper Strip for LPG 12.5x1.5-3.0x75mm with	4
K40100	3.2mm hole per ASTM specifications Connecting Tubing Sulfur-free plastic-lined tubing for connection of test cylinder valve to sample source. With ¼" stainless	1 t
K25100	steel and aluminum connectors. 24" long ASTM Copper Strip Corrosion Test Standards Colored reproductions of tarnished strips encased in a plastic plaque.	1
380-240-001	Silicone Carbide Paper, 240-grit For polishing copper strips prior to testing. Pack of 50 sheets	1
380-150-000	Silicone Carbide Grain, 150-grit For final polishing of copper strips prior to testing.  1 lb package	1
380-150-001	Silicone Carbide Paper, 150-grit For polishing copper strips prior to testing. Pack of 50 sheets	1
K25000	Polishing Vise Holds copper strip firmly in place without marring the edges. Stainless steel, mounted on	
K25090	a composition base Multi-Strip Polishing Vise Similar to K25000 but capable of holding four	1
250-000-12F 250-000-12C	strips at a time ASTM 12F Thermometer. Range: -5 to +215°F ASTM 12C Thermometer. Range: -20 to +102°C	1



K39900 LPG Corrosion Test Bath



#### **Specifications**

Conforms to the specifications of: ASTM D1838; GPA 2140; ISO 6251

Water Bath Specifications:

Capacity: four (4) LPG Corrosion Test Cylinders Maximum Temperature: 221°F (105°C) Temperature Control Stability: ±1°F (±0.5°C)

Heater Range: 0-750W

Bath Medium: 3.8 gal (14.4L) Water

Electrical Requirements: **C €** 

115V 60Hz, Single Phase, 6.5A 220-240V 50/60Hz, Single Phase, 3.4A

## **Shipping Information**

Shipping Weight: 27 lbs (12.2kg) Dimensions: 5.3 Cu. ft. **Dimensions** lxwxh,in.(cm)

12x10x24 (30x25x61) Net Weight: 19 lbs (8.6kg)

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

