

Copper Corrosion from Petroleum Products

test method

The Copper Strip Tarnish Test assesses the relative degree of corrosivity of petroleum products, including aviation fuels, automotive gasoline, natural gasoline, solvents, kerosene, diesel fuel, distillate fuel oil, lubricating oil and other products. A polished copper strip is immersed in 30 mL of sample at elevated temperature. After the test period, the strip is examined for evidence of corrosion and a classification number from 1-4 is assigned based on a comparison with the ASTM Copper Strip Corrosion Standards. For aviation fuels and natural gasoline, the sample tube is placed inside a stainless steel bomb during testing.

test bomb baths

Thermostatically controlled water bath immerses Copper Strip Corrosion Test Bombs at the required depth per ASTM specifications. Use for testing aviation gasoline, aviation turbine fuel and natural gasoline. Fully insulated, double-wall stainless steel construction. Choice of four-bomb and eight-bomb models. Optional removable test tube rack converts four-bomb model for testing of products not requiring corrosion bomb.

specifications

Conforms to the specifications of:
ASTM D130; IP 154 FSPT DT-28-65; ISO 2160; DIN 51759; FTM 791-5325; NF M 07-015

Testing Capacity:

K64310/K64319: four (4) copper strip corrosion test bombs

K64320/K64329*: eight (8) copper strip corrosion test bombs

Maximum Temperature: 221°F (105°C)

Temperature Control Stability: $\pm 0.09^\circ\text{F}$ ($\pm 0.05^\circ\text{C}$)

Heater: 1000W

Bath Medium:

K64310/K64319: 6.1 gal (23.1 L) water

K64320/K64329: 7.2 gal (27.2 L) water

Electrical Requirements:

115V 60Hz, Single Phase, 10A

220-240V 50/60Hz, Single Phase, 5A

ordering information

catalog no.	description
K64310	Copper Strip Corrosion Test Bomb Bath, 4-Unit, 115V 60Hz
K64319	Copper Strip Corrosion Test Bomb Bath, 4-Unit, 220-240V 50/60Hz
K64320	Copper Strip Corrosion Test Bomb Bath, 8-Unit, 115V 60Hz
K64329	Copper Strip Corrosion Test Bomb Bath, 8-Unit, 220-240V 50/60Hz



K64310 4-Place Copper Corrosion Test Bath

test tube baths

Constant temperature bath immerses 20 test tubes for copper strip tarnish tests of products not requiring a test bomb, including: diesel fuel, fuel oil, automotive gasoline, Stoddard solvent, kerosene and lubricating oil. Operator and equipment are protected by an overtemperature control circuit which automatically interrupts power to the unit should bath temperature exceed a programmed cut-off point. Welded stainless steel inner wall and powder coated steel outer wall construction with built-in support rack. Fully insulated.

specifications

Conforms to the specifications of:
ASTM D130; IP 154 FSPT DT-28-65; ISO 2160; DIN 51759; FTM 791-5325; NF M 07-015

Testing Capacity:

Twenty (20) copper strip corrosion test tubes

Maximum Temperature: 221°F (105°C)

Temperature Control Stability: $\pm 0.09^\circ\text{F}$ ($\pm 0.05^\circ\text{C}$)

Heater: 1000W

Bath Medium: 7.2 gal (27.2 L) water

Electrical Requirements:

115V 60Hz, Single Phase, 10A

220-240V 50/60Hz, Single Phase, 5A

ordering information

catalog no.	description
K64330	Copper Strip Corrosion Test Tube Bath, 20-Unit, 115V 60Hz
K64339	Copper Strip Corrosion Test Tube Bath, 20-Unit, 220-240V 50/60Hz
K64330-6B-8T	Optional Rack, 6-Bomb, 8-Tube

Copper Corrosion from Petroleum Products

copper strip corrosion test bomb

- For aviation fuels and natural gasoline

Precision machined stainless steel bomb inserts in copper corrosion bath for testing aviation fuels and natural gasoline. Withstands test pressure of 100psi (689kPa) per specifications. Threaded cap with O-ring gasket and knurled circumference tightens by hand to a positive seal. A 1/8" groove in the bomb threads permits safe, gradual release of pressure when opening the bomb.

specifications

Conforms to the specifications of:

ASTM D130, D6074, D6158; IP 154; ISO 2160; DIN 51759;

FTM 791-5325; NF M 07-015

Net Weight: 1 lb (0.45kg)

Shipping Information:

Shipping Weight: 2 lbs (0.91kg)

ordering information

catalog no.	description
K25200	Copper Strip Corrosion Test Bomb

accessories

K25080	Copper Test Strip
332-004-004	Test Tube 25 x 150 mm
332-004-002	Viewing Test Tube
	Protects copper strip during inspection or storage
K25100	ASTM Copper Strip Corrosion Standards
	Colored reproductions of tarnished strips encased in a plastic plaque
380-220-001	Silicone Carbide Paper, FEPA Grade, 220 grit
	For polishing of copper strips prior to testing;
	Pk of 50 sheets
380-150-003	Silicone Carbide Grain, FEPA Grade, 150 grit
	For final polishing of copper strips prior to testing;
	1 lb package
K25000	Polishing Vice
K25090	Multi-Strip Polishing Vice
250-000-12F	ASTM 12F Thermometer
250-000-12C	ASTM 12C Thermometer



test apparatus for aviation fuels and natural gasoline

ordering information

catalog no.	description	qty
K64310	Copper Strip Corrosion Test Bomb Bath, 4-Unit, 115V 60Hz	1
K64319	Copper Strip Corrosion Test Bomb Bath, 4-Unit, 220-240V 50/60Hz	1
K25200	Copper Strip Corrosion Test Bomb	4
K25080	Copper Test Strip	4
332-004-004	Test Tube 25 x 150 mm	4
332-004-002	Viewing Test Tube	4
K25100	ASTM Copper Strip Corrosion Standards	1
380-220-001	Silicone Carbide Paper, FEPA Grade, 220 grit	1
380-150-003	Silicone Carbide Grain, FEPA Grade, 150 grit	1
K25000	Polishing Vice	1
250-000-12F	ASTM 12F Thermometer	1
250-000-12C	ASTM 12C Thermometer	1

test apparatus for diesel fuel, fuel oil, automotive gasoline, stoddard solvent, kerosene, lubricating oil, and biodiesel

ordering information

catalog no.	description	qty
K64330	Copper Strip Corrosion Test Tube Bath, 115V 60Hz	1
K64339	Copper Strip Corrosion Test Tube Bath, 220-240V 50/60Hz	1
K25080	Copper Test Strip	20
332-004-004	Test Tube 25 x 150 mm	20
332-004-002	Viewing Test Tube	20
K25100	ASTM Copper Strip Corrosion Standards	1
380-220-001	Silicone Carbide Paper, FEPA Grade, 220 grit	1
380-150-003	Silicone Carbide Grain, FEPA Grade, 150 grit	1
K25090	Multi-Strip Polishing Vice	1
250-000-12F	ASTM 12F Thermometer	1
250-000-12C	ASTM 12C Thermometer	1