

CORROSION OF CAST ALUMINUM ALLOYS IN ENGINE COOLANTS TESTER



Corrosion of Cast Aluminum Alloys in Engine Coolants Tester TT-4340

Corrosion of Cast Aluminum Alloys in Engine Coolants Tester TT-4340 complies with ASTM D4340 Standard Test Method for Corrosion of Cast Aluminum Alloys in Engine Coolants Under Heat-Rejecting Conditions.

Corrosion of Cast Aluminum Alloys in Engine Coolants Tester TT-4340 encompasses a laboratory screening procedure to assess the ability of engine coolants to prevent corrosion of aluminum casting alloys under heat-transfer conditions commonly found in aluminum cylinder head engines.

APPLICATIONS

The Torontech TT-4340 is specifically designed to perform the ASTM D4340 test, a critical procedure for evaluating an engine coolant's ability to protect cast aluminum alloys under heat-rejecting conditions. This test directly simulates the high-stress, high-temperature environment of a modern aluminum cylinder head, providing a crucial measure of a coolant's performance in preventing localized, high-temperature corrosion.

This specialized heat-transfer corrosion analysis is vital for:

- **Automotive & Engine OEMs:** Essential for the validation and approval of coolants for modern engines that rely heavily on aluminum heads and blocks, ensuring long-term durability and preventing premature failure.
- **Coolant & Additive R&D:** Serves as a primary performance benchmark for developing advanced Organic Acid Technology (OAT) and hybrid coolant formulations, proving their effectiveness in protecting heat-rejecting aluminum surfaces.
- **High-Performance & Racing:** A critical test for qualifying coolants used in high-output engines where aluminum components are subjected to extreme thermal stress, preventing pitting and potential engine damage.
- **Heavy-Duty Engine Manufacturing:** Used to verify coolant performance for modern diesel engines that incorporate aluminum components to reduce weight, ensuring protection against corrosion over demanding, long-haul service

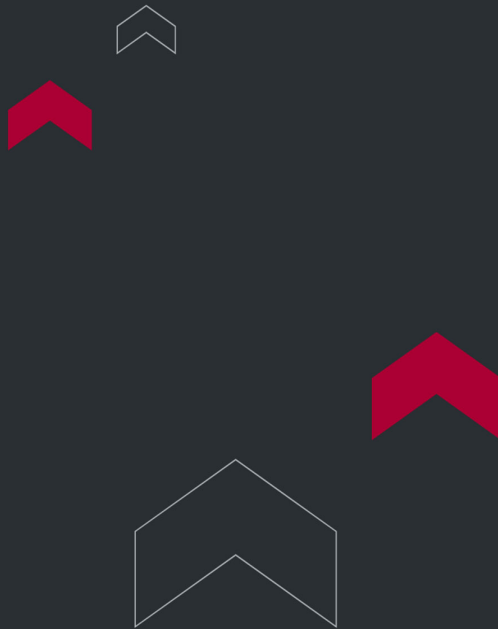
intervals.

FEATURES

- The separate design facilitates easy injection and testing.
- Precision valve body with silicon ring ensures leak-free operation.
- Includes a polymethylmethacrylate shield for added protection.
- The apparatus is equipped with a stopwatch and buzzer for indication.
- Features a special cover to protect the operator.

TECHNICAL SPECIFICATIONS

1. Rated Voltage: AC 220V $\pm$ 10%, 50Hz (110V also available)
2. Power: 300W (Continuously adjustable)
3. Pressure Gauge: 0~0.4MPa
4. Timer: Digital timer: 0~999 hours
5. Ambient Requirements: Temperature: 5 to 500°C; Humidity: $\leq$ 85%



Torontech Inc.

251 Consumers Road, Suite 1200
Toronto, Ontario, M2J 4R3, Canada 

Phone: +1 416 368 2721 | Fax: +1 416 981 7652
Email: info@torontech.com

Torontech, LLC

601 Brickell Key Drive, Suite 700
Miami, FL 33131, USA 

Toll-Free: 1-866-383-7919
Email: sales@torontech.com

Torontech ME FZE

Meydan Grandstand, 6th Floor,
Meydan Road, Nad Al Sheba,
Dubai-261440, UAE 

Phone: +971 488 19252
Email: me@torontech.com

