



## APPLICATION NOTE – VEHICLE BRAKE FLUID TESTING

**Application Need:** Determining when to replace brake fluid is critical to the safety of the vehicle and to reducing overall maintenance costs. This can be particularly applicable in vehicles utilizing ABS technology. Two factors are critical in this determination: the amount of water absorbed in the brake fluid, and the actual boiling point of the brake fluid.

**The Problem:** All DOT3 and DOT4 brake fluids are hygroscopic and will absorb water over time. As the water concentration increases, the boiling point of the brake fluid decreases. This results in decreased effectiveness of the hydraulic brake system. Safety concerns such as loss of brake function can occur because of this problem.

Water contamination in brake fluid also causes corrosion of critical braking components, particularly in ABS equipped vehicles. Replacement of these components is extremely expensive, costing thousands of dollars.

**The Solution:** The Reichert Brake-Chek Refractometer can accurately measure both the water content and boiling point of DOT3 and DOT4 brake fluids. These diagnostic tools can be readily used in the shop or field environment. No expensive and time-consuming laboratory. No boiling of brake fluid, release of toxic vapors, or special disposal of the hazardous sample is required. Here are some of the key benefits of this instrument:

- ✓ Accurate measurement of boiling point and water content in brake fluid. ✓ Small sample size required, just a few drops.
- ✓ Portable, handheld tool
- ✓ Automatic Temperature Compensation ensures that all readings are accurate and precise, regardless of environment.

### Products Recommended:

**Brake-Chek digital Pocket, Fahrenheit model,** Reichert Cat # 13940016 for DOT3 and DOT4 brake fluids

**Brake-Chek digital Pocket, Celsius model,** Reichert Cat # 13940017 for DOT3 and DOT4 brake fluids

**Brake-Chek Model BC3,** Reichert Cat # 13759600 for all DOT3 brake fluids **Brake-Chek**

**Model BC4,** Reichert Cat # 13759500 for all DOT4 brake fluids