

# Cost Effective Test Packages for Brake Fluid and Diesel Exhaust Fluid



**ALS Tribology provides two test packages targeted at monitoring Brake Fluid and Diesel Exhaust Fluid (DEF). These test packages provide a basic quality check of these products for fluid condition and contaminants.**

**Brake Fluid**, like other fluids in operating equipment, requires monitoring to ensure the fluid has not outlived its service life. Since brake fluid attracts water (hygroscopic), excessive moisture content tends to be a leading concern. Corrosion is also a concern, especially with excessive moisture contamination.

Checking pH and metals in the brake fluid is also important for monitoring corrosion, or the tendency for corrosion to occur. A low boiling point, also a result of excessive water contamination, can lead to failure of the brake operating system. Brake fluid is designed to have a high boiling point to withstand the high temperatures generated during braking.

Testing also checks for possible oil contamination due to improper product mixture.

ALS can provide a quick and cost effective brake fluid test package that will monitor contaminants and critical service parameters for the health of your brake fluid system and operating components.:

- Metals content
- Water Content
- Boiling Point
- Oil Contamination
- Particulate Contamination
- pH
- Appearance
- Color

*This test package is applicable to all glycol based formulations: DOT 3, DOT 4, and DOT 5.1. DOT 5.0 brake fluid is silicon based; therefore the testing details would not be entirely applicable.*



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**Diesel Fuel Exhaust Fluid (DEF)**, which is basically a mixture of 32.5 % ammonia high purity urea mixed with 67.5% high purity demineralized water. generally does not require routine testing. However, it is important to be able to monitor for contamination and proper urea concentration from time to time.

ALS has designed a test package to quickly provide a check on DEF for concentration and contaminants:

- Urea Content
- Solids
- Oil/Fuel Contamination
- pH
- Metals for contaminants and corrosion

This DEF test package provides a convenient screening analysis to ensure the fluid in service for vehicles using Selective Catalyst Reduction Exhaust Systems can effectively convert nitrogen oxide pollutants (NOx) into harmless nitrogen and water into the atmosphere.

Contact us at [reliability@alsglobal.com](mailto:reliability@alsglobal.com) to see how test packages can optimize asset health and reliability.

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