

THE MIXED FUTURE of UNIVERSAL OILS

As Champion Brands, LLC rolls out its super-premium lineup of heavy duty engine oils, you may notice that these products no longer make claims against the API specification for gasoline engines. In order to meet gasoline engine oil specifications, the API requires engine oil to contain less than 800ppm of phosphorous in order to protect the life of catalyst in exhaust after-treatment devices.

During the category development for API CK-4 and API FA-4, the API elected not to apply a waiver for the phosphorous chemical limit to diesel engine oils meeting the new diesel category.

As a result of this change, there will be fewer 'universal oils' - those carrying API Service CK-4/SN - in the marketplace. Those universal oils that are on the marketplace will be formulated with lower concentrations of the key anti-wear element phosphorous, and may not meet stringent new OEM specifications such as Volvo VDS-4.5, Cummins CES 20086 & Detroit Diesel's DFS93K222. And while OEMs turn away from low phosphorous formulations for heavy-duty diesel service, gasoline engine makers are gearing up to release their own set of new, divergent specifications specifically geared to reduce the phenomenon of low-speed pre-ignition (LSPI), and an aging fleet of trucks requiring GM Dexos quality oil will not likely be serviceable with the new API Service CK-4/SN oils.

It is difficult to speculate how long universal oils will remain in the marketplace. However as gasoline and diesel engine makers focus on advances in engine design, these engines are likely to have further divergence in their lubrication needs. The key question for the fleet owners of today is whether the simplification to universal oils still delivers the same value it once did, and whether it indeed delivers the best level of protection for vehicles across their fleets.

