

Single SOS Kit can be used for;  
***Oil Analysis, includes a TBN-TAN Titration***

**Single SOS Kit**

P/N 72-TBNTAN Source 345

***Oil Analysis***

20 Elements

True Kinematic Viscosity

Oil Condition Analysis for Soot, Oxidation, Nitration, and Sulfur

Contaminants Water, Fuel, and Glycol

Heavy Metal Analysis

Hydraulic & Filtered Transmission Compartments Receive Particle Count, and Microscopic Image when required

***TBN (Total Base Number)***

TBN of a used lubricant is a measurement of its ability to neutralize acid using basic buffers; this is a test for engines. All diesel fuels contain some sulfur, but the amount is determined by the amount of sulfur in the crude oil and/or the refiner's ability or desire to remove it. One of the functions of lubricating oil is to neutralize sulfur by products (sulfurous and sulfuric acids), as well as organic acids formed by oxidation. In this way, the oil helps prevent corrosive damage. Additives in the oil contain alkaline compounds formulated to neutralize these acids. The measure of reserve alkalinity in the oil is known as the TBN. Generally, the higher the TBN value, the more reserve alkalinity capacity the oil contains. This test can benefit users of low-ash oils, where the window between good/bad is very narrow.

***Includes TAN (Total Acid Number)***

TAN of a used lubricant is one measure of its degree of degradation by oxidation; this test is primarily for sour gas applications and other non-engine compartments, like landfill, methane, natural gas, hydraulic, or pump applications. TAN is an analytical test we use to determine the deterioration of lubricants: the more acidic a lubricant is, the further its degradation has preceded. As oils or hydraulic fluids break down, they generally form acidic byproducts that can be corrosive to metal components, accelerate wear, form deposits, and increase viscosity. As a fluid degrades, the levels of corrosive acids increase along with the danger of component failure. Oxidation, as measured by infrared spectroscopy, correlates well with TAN