

New diesel fuel filtering process created

March 8 2007

U.S. researchers have developed a simple, inexpensive filtering process that could prevent costly instability and deterioration of military diesel fuel.

The U. S. military is the world's largest consumer of fuel, but instability in stored fuel is a major problem for defense officials.

Although civilian fuels typically are used within days or weeks of production, military fuel typically is stored for long periods of time. As stored diesel fuel is used, storage tanks are topped with new fuel of different ages, from varying refineries and geographic areas.

That mixing of fuels with different chemical characteristics results in instability and formation of sludge and sediments that can damage engines.

Now George Mason University scientist George Mushrush and colleagues the U.S. Naval Research Laboratory have developed a simple filtering process for new fuel that can remove the chemical compounds responsible for fuel instability and prevent fuel degradation in the tank.

The technology is to be detailed in the March 14 issue of the journal Industrial & Engineering Chemistry Research.

Copyright 2007 by United Press International



Citation: New diesel fuel filtering process created (2007, March 8) retrieved 27 April 2024 from https://phys.org/news/2007-03-diesel-fuel-filtering.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.