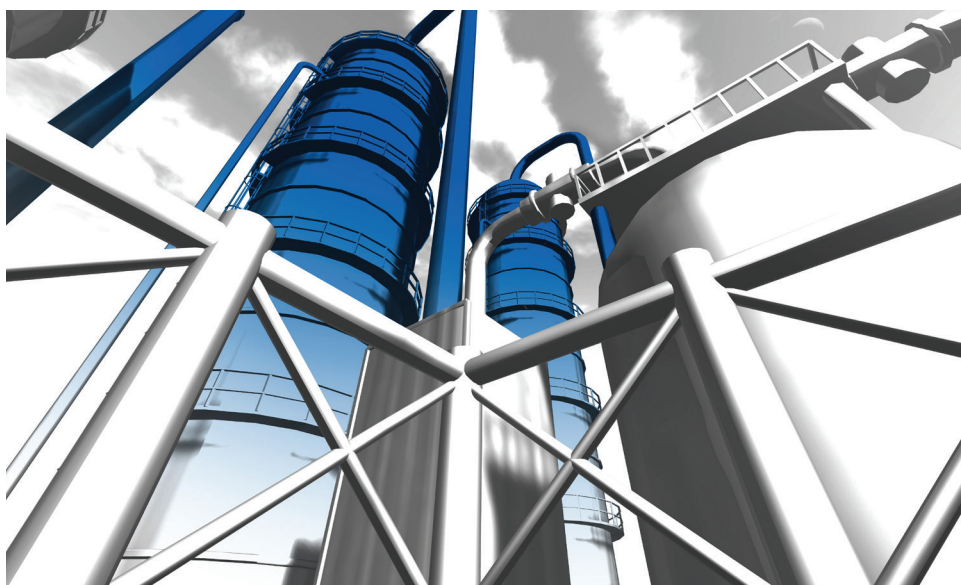


FUELS

HiTEC[®] 4174

Antioxidant



A Versatile Antioxidant For Use In Both Gasoline and Biodiesel

HiTEC® 4174 Antioxidant

A Versatile Antioxidant For Use In Both Gasoline and Biodiesel

Application

HiTEC® 4174 is a versatile antioxidant that can be used in both gasoline and biodiesel. It inhibits gum formation in FCC gasoline and catalyzes inhibitor-sweetening reactions in sour gasolines. It is approved for both civilian and military gasolines. Furthermore, it helps inhibit oxidation and loss of stability in a wide variety of biodiesel feedstocks.

Key Performance Benefits

Gasoline

- Improves storage stability of a wide range of gasolines
- Inhibits gum formation in FCC gasolines
- Catalyzes inhibitor-sweetening reaction in sour gasolines

Biodiesel

- Helps prolong biodiesel storage shelf life
- Inhibits biodiesel's tendency to react with oxygen
- Helps mitigate polymer and residue formation that can plug filters and damage engines

Recommended Dosage

FCC gasolines	16 to 40 ppmw (4.2 to 10.5 PTB)
Pyrolysis gasolines	40 to 160 ppmw (10.5 to 42 PTB)
Biodiesel	100 to 2000 ppmw, depending on the nature, source and desired performance

Please contact your Afton Chemical representative for specific recommendations.

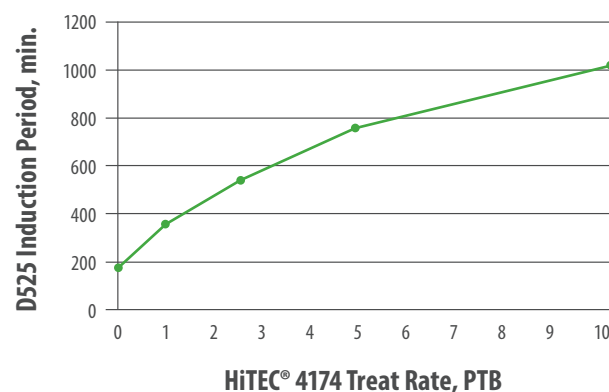
Typical Characteristics

Appearance	Dark red liquid
Density, lbs/gal.	7.83
Specific Gravity @ 15.6/15.6°C	0.94
Flash Point, °C (PMCC)	120 min.
Viscosity @ 38°C, cSt	9.5
Freeze Point, °C	14

Handling Information

Max Handling Temp: 40°C
Shelf Life: 24 months @ ambient

HiTEC® 4174 Induction Period Response
ASTM D525



HiTEC® 4174 Biodiesel Antioxidant Performance
Compared to typical Butylated Hydroxytoluene (BHT) Antioxidant

