

FUELS

HiTEC[®] 3000

Fuel Additive



Octane Improver and Emissions Reducer for Unleaded Gasoline



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Key Performance Benefits

HiTEC® 3000 fuel additive utilises Afton's patented *mmt*® octane improver to allow refiners to optimise production by reducing energy consumption and refinery emissions whilst maintaining gasoline octane quality.

Use of HiTEC® 3000 can therefore also increase gasoline pool octane quality without increased energy consumption, providing the most cost effective means to meeting specification, and marketing, octane quality requirements.

Primary Benefits

Improved Economics - Use of *mmt*® in very small amounts (one drop per litre gasoline) increases octane in an environmentally friendly and cost effective manner, allowing for optimum gasoline blending and production, increased refinery flexibility and reduced need for component storage

Reduced Energy Consumption - Allows refiners to lower unit operation severity, resulting in lower crude consumption, extension of gasoline pool and improved refinery efficiency

Sustainable Environment - Reduces emissions of greenhouse gases at the refinery and allows cleaner burning fuel formulations

Optimal Performance - Provides wear protection for older vehicles and maintains modern vehicle emissions systems at optimum performance.

Globally Approved - HiTEC® 3000 series of *mmt*® is the only manganese fuel additive to fulfil US EPA requirements and China MEP requirements. Afton is the only registrant of *mmt*® under the EU REACH legislation.

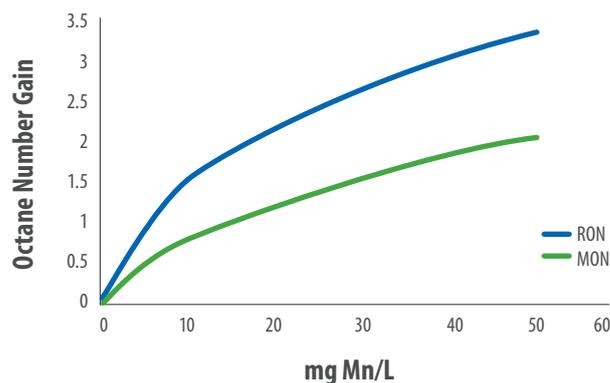
Recommended Dosage

Typical treat rates range from 8 mg Mn/litre to 18 mg Mn/litre although in specific markets higher levels can be employed for maximum octane improvement. Treat-rate may vary depending on base fuel. Please contact your Afton Chemical representative for specific recommendations.

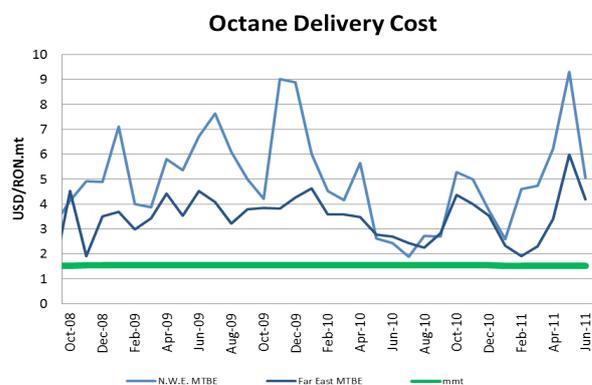
Handling Information

Max Handling Temp: 55°C
Shelf Life: 120 months

HiTEC® 3000 Provides a Boost in Octane Number



HiTEC® 3000 The Most Economic Route to Octane



Typical Characteristics

Appearance:	Light to dark clear amber liquid
Density at 20°C, g/cm ³ :	1.38
Density, lbs/gal:	11.48
Flash Point, °C (PMCC):	82 min.
Freeze Point, °C:	-1
Kinematic Viscosity at 20°C, mm ² /s:	5.2
Vapour Pressure at 20°C, mm Hg:	0.05
Manganese, % wt:	24.4 min