



## PT- ANTIKNOCK ADDITIVES AND COMPONENTS OCTANE BOOSTERS

### Need for octane supplement

Whether crude oil refineries or blending and distribution units are equipped with state-of-the-art equipment to produce fuels that meet world standards gasoline octane adjustment may still be needed.

Many refineries around the world have not been upgraded with the latest technologies since their construction to maximize production of gasoline. As a consequence many refiners and fuel distributors import high octane gasoline and other components that are blended to make a gasoline that meets fuel specifications. Unfortunately they have had no recourse but blending controversial chemicals such as organometallics and certain oxygenates to their gasoline blend stocks.

For those refiners there are only two alternatives:

- 1. Upgrading refineries that require:  
Large capital investment  
Costly catalysts and more costly when ran at maximum severity  
Five to Ten years project implementation
- 2. Blend a organometallic free component that is able to increase the octane of gasoline to the required levels and at the same time help produce a clean fuel.

ProTec International has developed non metallic antiknock additives and components when combined with its Fuel Combustion Modifier provide refiners an economical solution to meet gasoline octane requirements, improve fuel quality and answer environmental challenges. Can be used as primary antiknock for low and high-octane gasoline and as secondary antiknock with leaded and unleaded gasoline.

### PT-10515G - Octane Booster & Fuel Quality Improver

Non metallic antiknock components used to meet gasoline octane requirements, improve fuel quality and answer environmental challenges. Can be used as primary antiknock for low and high-octane gasoline and as secondary antiknock with leaded and unleaded gasoline.

Can be used as secondary antiknock with leaded aviation gasoline.

Octane Increase: up to 27 RON or higher depending on the composition and the octane level of the base gasoline or naphtha.

### **ANTIKNOCK 01 – Octane Booster**

Custom designed synergistic non metallic antiknock additives and components to provide refiners an economical solution to meet gasoline octane requirements, improve fuel quality and answer environmental challenges. Can be used as primary antiknock for low and high-octane gasoline and as secondary antiknock with leaded and unleaded gasoline.

Octane Increase: up to 30 RON or higher depending on the composition and the octane level of the base gasoline or naphtha.

### **ANTIKNOCK 02 – Octane Booster**

Custom designed synergistic non metallic antiknock additives and components to provide refiners an economical solution to meet gasoline octane requirements, improve fuel quality and answer environmental challenges. Can be used as primary antiknock for low and high-octane gasoline and as secondary antiknock with leaded and unleaded gasoline.

Octane Increase: up to 30 RON or higher depending on the composition and the octane level of the base gasoline or naphtha.

### **ANTIKNOCK 03 – Octane Booster**

Custom designed synergistic non metallic antiknock additives and components to provide refiners an economical solution to meet gasoline octane requirements, improve fuel quality and answer environmental challenges. Can be used as primary antiknock for low and high-octane gasoline and as secondary antiknock with leaded and unleaded gasoline.

Octane Increase: up to 30 RON or higher depending on the composition and the octane level of the base gasoline or naphtha.