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THE DEVELOPMENT OF THE FPC CATALYST

History

During the 2nd World War, most of the naturally occurring high octane gasoline refined in the USA was being supplied to the military. This necessarily created shortages for the consumer at home. As a result, considerable research began to develop additives that could be used to increase the octane of fuels that were not naturally of good octane quality. Much of the early research involved transition metals including lead, manganese and iron.

One chemical compound that combined iron with an aromatic nitrate (the precursor to the FPC[®] Catalyst active ingredient) had little effect upon octane, but had a profound impact upon fuel efficiency and emissions, particularly carbon monoxide and smoke. However, the chemical was unstable and decomposed readily to a form that was inactive. The war ended and high octane fuels became plentiful again. As a result, research of this chemical was discontinued.

Later research by interested chemists continued to confirm the iron based compound was an effective combustion improver, but the trouble with stability persisted until the 1980's.

Manufacturer Involvement

In the late 1970's, FPC's manufacturer began to market a formulation of this chemical that was represented as being stable to the industrial sector of the United States. It soon became apparent the stability problem had not been corrected, and marketing the unstable formulation was discontinued.

The manufacturer determined to conduct original research and resolve this problem since the chemical showed so much promise. The research discovered several factors that contributed to the chemicals instability. When corrected, the manufacturer realized the chemical was not only more stable and more active than ever before, but that it could be manufactured in heretofore impossible concentrations. This made the chemical even more cost effective for the end user.

These new developments have since been patented by RDI Construction, Inc., who now holds several patents protecting the formulation of this much superior chemistry.

Shelf Life Studies

Studies designed to document the product's effective life, known as "the shelf life", have shown the product to be fully active for as much as two years. Further, retained samples from each batch of FPC[®]

held at the manufacturing plant since as early as 1992 are still very viable.

In spite of the extended shelf life for FPC products, the manufacturer recommends our customers do not carry inventories of the product beyond a 90-day (3 month) supply. This policy is designed to prevent losses to the customer due to improper storage, theft, and personnel turnover.

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