Based on the new EnhanceR Technology Platform

ProtAgon catalysts are designed to have an enhanced propylene selectivity, enabling high propylene yields (in the 10-20 wt% range) for FCC units running in the petrochemical mode. These high propylene yields are achieved without a loss of the intrinsic cracking activity.

The enhanced propylene selectivity of ProtAgon catalysts can also be used to provide improved operational flexibility at constant high propylene yields by relieving constraints in FCC units which are not able to handle very high propylene production levels.

ProtAgon catalysts provide an outstanding degree of formulation flexibility. This allows customised tuning of:

- Pentasil activity,
- Selective cracking activity,
- Matrix cracking activity,
- Metals tolerance,
- Hydrogen transfer activity.

EnhanceR-based catalysts are manufactured with the proprietary GRACE alumina-sol binder system which ensures low particulate emissions due to its excellent attrition resistance.

ProtAgon catalysts bring the following performance benefits to unit operations/ product quality:

- Very high propylene yields.
- Improved operational flexibility at constant propylene.
- No loss of intrinsic cracking activity.
- Contaminant metals tolerance.
- Excellent bottoms cracking.
- No coke penalty.
- No attrition penalty.

The high degree of complexity of the ProtAgon catalyst system requires particularly careful customised tuning to the feed properties and specific FCCU operation mode targets and constraints.

ProtAgon catalysts are fully compatible with the ZSM-5 additives OlefinsMax®, OlefinsUltra®, and OlefinsUltra HZ®, which can be used to fine-tune light olefins yields.

ProtAgon catalysts are fully compatible with the Grace clean fuels and environmental additives D-PriSM®, DENOX®, XNOX® W, Super DESOX® and combustion promoters CP® 3, CP® 5, and CP® P.

Technical Service:

- Optimization of usage rate.
- Monitoring unit performance.
- Analysis of equilibrium catalysts.
- Assistance during additive testing.
- Support regarding catalyst injection system equipment.

For more information on Grace FCC Catalysts and Additives, contact our sales representatives:

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The information contained herein is based upon our testing and experience and is believed to be accurate. Since operating conditions may vary and since we do not control such conditions, we must disclaim any warranty, express or implied, with regard to results to be obtained from the use of our products or with regard to application of GRACE Davison techniques. 09 April 2014