

CLARITY™ Prime

CLARIANT'S AI-POWERED DIGITAL SERVICE FOR OPTIMIZED CATALYST OPERATION

CLARITY™ CLARIANT'S SERVICE PORTAL - YOUR DIGITALIZED EXPERT SUPPORT

Digital catalyst operation insights at the click of a button. Every day, your plant produces an abundance of data that is useful for monitoring purposes. With the right tool and expert support, this data can be effectively used to help you to improve your operation. The result: reduced costs and increased profitability. Our digital technical support through **CLARITY IS INCLUDED** with the use of Clariant catalysts.



DASHBOARDS AND VISUALIZATION OF CATALYST PERFORMANCE

- Faster and easier data gathering and sharing
- Important KPIs instantly visualized in a plant-specific dashboards



EXPERT SUPPORT AND CATALYST EVALUATIONS

- Receiving Clariant support more quickly
- Easier communication: Catalyst user and Clariant look at the same data

CLARITY™ PRIME - CLARIANT'S ADVANCED DIGITAL SERVICES FOR IMPROVED PLANT RELIABILITY, SAFETY AND MAXIMIZED PROFITS

CLARITY Prime is an upgrade of the cloud-based service portal. Clariant catalyst users subscribing to CLARITY Prime benefit from automated catalyst health alerts and machine-learning-based performance projecting tools. These premium features combined with advanced technical support are designed to enhance your experience on the operation of Clariant catalysts. Available for all syngas plants using Clariant catalysts as **PAID SERVICE**.



AUTOMATED CATALYST ALERTING

- Automated alerting on catalyst related events.
- Tackle identified problems early and proactively
 - Act fast with mitigation recommendations by Clariant experts



CATALYST PERFORMANCE PROJECTIONS

- Performance prediction tool for shift catalysts.
- Create what-if scenarios and their impact on production and KPIs
 - Plan turnaround cycles



CATALYST SPECIFIC BENCHMARKING

- Compare catalyst performance to your peers.
- Benchmark important catalyst KPIs
 - Identify potentials for operational improvements

CLARITY™ Prime

BENEFITS OF THE ADVANCED DIGITAL SERVICES



AUTOMATED CATALYST ALERTING

The Catalyst Health Alerting services for Clariant catalysts, comprises algorithms scanning 24/7 for anomalies and deviations related to the catalyst operation.

BENEFITS

- Automation enables you to react quickly and proactively on detections related to the operation of Clariant catalysts.
- You receive specific guidance for mitigation actions with each alert.
- Clariant experts support reviewing the operational data and troubleshooting through quick interactions in the web-based interface, phone calls or online meetings.
- This service helps mitigate operational risks such as avoiding poisoning of downstream catalysts, emergency catalyst replacements and enables you to identify and act fast on critical events.



CATALYST PERFORMANCE PROJECTIONS

A cutting-edge machine-learning-based model for you to run “what if” lifetime performance scenarios of ShiftMax® catalysts in your HTS and LTS units. This tool enables self-service catalyst performance projections based on the current and historical operational performance of the catalyst.

BENEFITS

- Empowers you to forecast the ShiftMax® catalyst performance based on current and historical operational data and different future scenarios.
- Enables you to identify optimization potentials and risks.
- Supports informed decision-making for catalyst operation to meet planned turnaround windows based on economic considerations.



CATALYST SPECIFIC BENCHMARKING

The benchmarking service enables Clariant catalyst users to compare important catalyst specific KPIs with and gain insights on the performance of their plant versus their peers in the industry.

BENEFITS

- Evaluate critical catalyst KPIs such as conversion efficiency, temperatures, pressure drop and others to benchmark your own plant performance.
- Gain insights to identify potentials for operational improvements.

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