EURECAT

LOAD AND GO™

Totsucat® Sulfiding and Passivation

Totsucat® with optional Passivation allow for safe loading under air with reasonable loading and handling precautions. Passivation can be added to any of the listed Totsucat® (including Totsucat® CFP) LOAD & GO™ service allows for easier and safer handling during catalyst loading.

Totsucat® G

For:
Naphtha HT
Gasoline Post Treat
Tail Gas Units
Lube Units

When to use Totsucat® G Presulfiding and Preactivation:
For units that are difficult to start up due to operational restrictions, units where optimum sulfiding cannot be achieved, and/or units where minimal start up time is economically beneficial. Typical Applications: NHT, Gasoline Post-treat, Tail Gas, Lube, and Hydrogen units.

Operational Conditions:
Totsucat G has no sulfur requirement for the feed. Start-up can be in liquid phase or gas phase. Gas recirculation is not required since the catalyst is totally preactivated. Unit temperature restrictions are not an issue.

Handling and Loading Conditions:
Preactivated catalysts are packaged in drums or flowbins. Standard form is non-passivated and must be loaded under inert conditions. Passivation allows for loading under air

Totsucat® E

For:
Cat Feed HT
Diesel HT
(Use Totsucat D for ULSD Catalysts)

When to use Totsucat E Presulfiding and Preactivation:
Where there is sufficient sulfur in the feed and the desire to minimize start-up time and avoid the problems associated with in-situ sulfiding. Typical Applications: Cat Feed, Low Sulfur Diesel, and VGO hydrotreaters.

Operational Conditions:
Totsucat E requires sufficient sulfur in the feed (at least 0.5 wt%) to complete activation. Startup can be liquid phase or gas phase. Gas recirculation and sufficient unit temperature (600-620F) to finalize activation of the catalyst is required.

Handling and Loading Conditions:
Preactivated catalysts are packaged in drums or flowbins. Without passivation, the catalyst must be loaded under inert conditions. Optional passivation allows for handling and loading under air.

Totsucat® CFP

For:
Any HT Unit Starting with Cracked Feeds

When to use Totsucat® CFP Presulfiding and Preactivation:
Where there are benefits to starting up with cracked feed stocks. Totsucat CFP allows the gradual introduction of cracked feeds during start-up without the 3-4 day delay typically recommended by catalyst manufacturers. Typical Applications: Coker Naphtha or units processing LCO or coker gas oil.

Operational Conditions:

Totsucat CFP has no sulfur requirement for the feed. Start-up can be in liquid phase or gas phase. Gas recirculation is not required since the catalyst is completely activated. Unit temperature restrictions are not an issue.

Handling and Loading Conditions:
Preactivated catalysts are packaged in drums or flowbins. Without passivation, the catalyst must be loaded under inert conditions. Optional passivation allows for handling and loading under air.

Eurecat U.S. Inc
1331 Gemini, Suite 310
Houston, TX 77058
Phone : 281.218.0669

Totsucat® D

For: ULSD Catalysts

When to use Totsucat® D Presulfiding and Preactivation:

Totsucat® D is optimized for sulfiding the latest generation of high activity catalysts typically used in ULSD applications. Typical Applications: ULSD hydrotreaters.

Operational Conditions:

Totsucat D has no sulfur requirement for the feed. Start-up can be in liquid phase or gas phase. Gas recirculation is not required since the catalyst is completely activated. Unit temperature restrictions are not an issue.

Handling and Loading Conditions:

Preactivated catalysts are packaged in drums or flowbins. Without passivation, the catalyst must be loaded under inert conditions. Optional passivation allows for safe handling and loading under air.

Totsucat® HC

For: Hydrocracking Catalysts

When to use Totsucat® HC Presulfiding and Preactivation:

Totsucat® HC uses special conditions to carefully sulfide Hydrocracking catalysts. Preactivated catalyst are especially useful for gas phase startups. Typical Applications: Hydrocracking Catalysts

Operational Conditions:

Totsucat HC has no sulfur requirement for the feed. Start-up can be in liquid phase or gas phase. Gas recirculation is not required since the catalyst is preactivated. Unit temperature restrictions are not an issue.

Handling and Loading Conditions:

Preactivated catalysts are packaged in drums or flowbins. Without passivation, the catalyst must be loaded under inert conditions. Optional passivation allows for safe handling and loading under air.

Totsucat® N

For: Hydrocracker Pretreat Catalysts

When to use Totsucat® N Presulfiding and Preactivation:

Totsucat® N is designed for sulfiding Hydrocracker Pretreat (HCPT) catalysts. Preactivated catalyst are especially useful for gas phase startups. Typical Applications: Hydrocracker Pre-treat catalysts.

Operational Conditions:

Totsucat N has no sulfur requirement for the feed. Start-up can be in liquid phase or gas phase. Gas recirculation is not required since the catalyst is preactivated. Unit temperature restrictions are not an issue.

Handling and Loading Conditions:

Preactivated catalysts are packaged in drums or flowbins. Without passivation, the catalyst must be loaded under inert conditions. Optional passivation allows for safe handling and loading under air.

Passivated Totsucat Loading Precautions

Precautions for Handling and Loading Passivated Totsucat® Catalysts

- **No air circulation through the loaded catalyst bed—No chimney effect**
- **Constant supervision of reactor loading**
- **Open catalyst containers stored in covered and ventilated area**
- **Continuous monitoring of temperature and SO_2 inside the reactor during loading**
- **Pressure test with nitrogen or hydrogen**
- **Stand-by refinery nitrogen availability**
- **Breathing air (SCBA) while inside reactor**

Eurecat offers on-site loading and start-up assistance

EURECAT