Chlorocel Adsorbents

Comprehensive Solutions for Chloride Removal

Chlorocel 901

A patented, specially promoted activated alumina designed for chloride removal with high CI-loading capacity (~18% by weight) with excellent resistance to "green oil" and organic chloride formation.

Suitable for both vapor and liquid phase applications and operating temperatures from ambient to 450°F (230°C).

Chlorocel RCL

A metal oxide promoted alumina effective in the destruction of organic chlorides, with subsequent adsorption of the resultant free HCI. Chlorocel RCL is intended for use as a trim layer in chloride guards for additional protection against organic chloride intrusion.

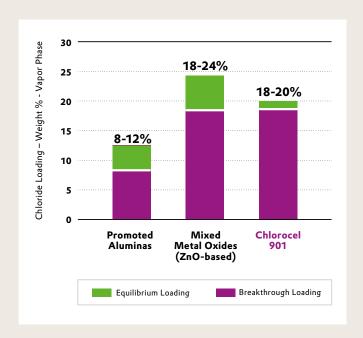
Suitable for both liquid as well as vapor phase applications.

Chlorocel 905

Zeolite based premium grade adsorbent for removal of organic as well inorganic chloride from both liquid & vapor phase applications. Specifically formulated to provide high chloride loading capacity while inhibiting formation of "green oil" formation and organic chlorides. It can be steamed to regenerate and used for another cycle.



(L to R, Chlorocel 901, Chlorocel RCL, Chlorocel 905)



Breakthrough/dynamic loading matters and not equilibrium loading.

Breakthrough loading determines the effective bed life.

The Chlorocel Solution

Vapor Phase / Liquid Phase

- Custom net gas, recycle gas and reformate chloride removal solutions for CCR, semi-regen and cyclic Catalytic Reforming Units
- · Alumina, zeolite and mixed metal oxide options
- · Ambient to 450°F (230°C) operation
- Graded and layered bed loadings for optimal performance
- Steamable/regenerable adsorbent option
- Effective control of "green oil" and organic chloride formation
- · Fluid dynamics optimization
- · Inert bed support as companion product
- Performance monitoring and change-out guidelines

Chlorocel 901 utilizes a patented multi-component chemical formulation to maximize the chemisorption mechanism. This results in chlorides being irreversibly bound within the adsorbent without increasing acidity. Low acidity means low potential for "green oil" and organic chloride formation. This unique formulation yields high CI-loading capacities and superior all-around performance.

Chlorocel RCL utilizes optimum level of metal oxide on alumina to ensure complete destruction of organic chloride and eventually adsorb resultant HCL.

Chlorocel 905 utilizes the right type of zeolite in its formulation to make it suitable for both organic chloride as well as inorganic chloride. Provides flexibility to operator to steam it and reuse it for an additional cycle.

Option — I Option — II Option — II Inorganic chloride Inorganic & organic Inorganic & organic removal chloride removal chloride removal **Chlorocel 901 Chlorocel 901 Chlorocel 905** Typically installed as Typically installed as Typically installed as 100% of bed volume 90% of bed volume for 100% of bed volume for chloride removal chloride removal for inorganic chloride as well as organic Chlorocel RCL chloride removal Typically installed as 10% of bed volume at effluent end of the vessel for applications with organic chlorides in the treater feed.

Disclaime

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