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(54) Title: ISOMERIZATION CATALYSTS

(57) Abstract: Extruded isomerization catalysts comprising MgO, a metal silicate clay binder and a stabilizer and methods of forming such isomerization catalysts are disclosed. Also disclosed are isomerization catalysts that exhibit a fresh isomerization rate and an aged isomerization rate that is at least 50% of the fresh isomerization rate. Embodiments of the isomerization catalysts disclosed herein include metal silicate clay binders that include a layered structure and metal silicate. The metal silicate clay binder may be present in an amount in the range from about 5 wt% to about 20 wt%. Exemplary stabilizers include one or more of ZrO₂, tetravalent rare earth metal and a trivalent rare earth metal. Stabilizers may be present in an amount up to about 40 wt%. One or more improved properties, such as piece crush strength and isomerization performance, are exhibited by the catalyst article.



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