MAXCEL™ TGS-01

TAIL GAS HYDROGENATION CATALYST SPHERES

Typical Properties		
Chemical	Co (as CoO)	~ 1.9 %
	Mo (as MoO_3)	~ 5.8 %
Physical	Surface Area	300 m^2/g
	Total Pore Volume	0.45 cc/g
	Flat Plate Crush Strength	30.0 lb_f/bead
	Bulk Density	43 lbs/ft^3 (689 kg/m^3)
	Size – nominal	5 mm spheres
Availability	Packaging	Oxide: 1,500 lbs (680.4 kg) supersacks actiCAT®: 3,000 lbs (1,360.8 kg) flow bins UltraCAT®: 3,000 lbs (1,360.8 kg) flow bins (alternative packaging available upon request)
Activation	Stoichiometric sulfur required for activation (by weight): 2,000 lbs (907.2 kg) supersacks	
	Loading density after activation: 45.5 lbs/ft^3 (729 kg/m^3)	
Application	Spherical cobalt-molybdenum (CoMo) on activated alumina catalyst for use in Claus tail gas treating units that contain a hydrogenation reactor (e.g. SCOT tail gas units). Optimized catalyst support structure provides high conversion of SO_2, COS, CS_2, and elemental sulfur in Claus tail gas with very low pressure drop. Also facilitates water-gas shift reaction in the hydrogenation reactor to reduce CO emissions from tail gas incinerator, producing additional hydrogen for reduction. Designed for use in tail gas units with a reactor inlet temperature of at least 500 °F (260 °C). Maxcel TGS-01 can be treated with actiCAT® TG presulfurization or UltraCAT® TG preactivation for simple and fast tail gas unit startup.	

*Physical properties shown reflect a typical value. Actual shipments fall within a specification range (provided upon request). Recommended contingency amount is 5 % of required volume to account for typical variation in loading density, losses due to handling, etc.

Evonik Operations GmbH
Business Line Catalysts
Rodenbacher Chaussee 4
63457 Hanau
Germany
PHONE +49 6181 59-13399
catalysts@evonik.com
www.evonik.com/catalysts

EVONIK
Leading Beyond Chemistry