

# MAXCEL™ TGS-01

## TAIL GAS HYDROGENATION CATALYST SPHERES

Typical Properties		
<b>Chemical</b>	Co (as CoO)	~ 1.9 %
	Mo (as MoO <sub>3</sub> )	~ 5.8 %
<b>Physical</b>	Surface Area	300 m <sup>2</sup> /g
	Total Pore Volume	0.45 cc/g
	Flat Plate Crush Strength	30.0 lb <sub>i</sub> /bead
	Bulk Density	43 lbs/ft <sup>3</sup> (689 kg/m <sup>3</sup> )
	Size – nominal	5 mm spheres
<b>Availability</b>	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)
<b>Activation</b>	Stoichiometric sulfur required for activation (by weight): 2,000 lbs (907.2 kg) supersacks Loading density after activation: 45.5 lbs/ft <sup>3</sup> (729 kg/m <sup>3</sup> )	
<b>Application</b>	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 <sub>2</sub> , COS, CS <sub>2</sub> , 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.

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### Evonik Operations GmbH

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

