

**TECHNICAL BULLETIN:**

## **Sulphiding of Tailgas Catalyst**

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1. Load catalyst in air.
- 2a. Purge System with N<sub>2</sub>, or
- 2b. Run in-line burner near stoichiometric air/fuel ratio
3. Warm catalyst bed to 200°C (390°F) with burner. Care should be exercised that the provisions for adding hydrogen sulphide to the system are ready to operate, otherwise the exposure of the catalyst to hydrogen in the absence of hydrogen sulphide can result in irreversible damage to the catalyst. Also, impaired catalyst activity can result if the catalyst is exposed to hydrogen sulphide for extended periods without hydrogen being present.
4. Switch to substoichiometric conditions, adjust so gas entering reactor contains 2 - 10% H<sub>2</sub> + CO.
5. Bleed in H<sub>2</sub>S (1 - 2%)
5. Ramp temperature to 315°C (600°F) "SLOWLY" (keep delta T below 25°C (50°F). Be sure exotherm is developing before heating past 450°F , then ramp temperature to 315°C (600°F) at about 15°C (25°F) per hour.
7. "Soak" the catalyst bed at 315°C (600°F) for 4 hours.
8. Cool reactor to less than 300°C (570°F) and Start.

## **HEALTH, SAFETY, AND ENVIRONMENTAL PRECAUTIONS**

CRITERION hydrotreating catalysts are made from chemicals which span a range from being almost non-toxic to being potential carcinogens. Full attention to these hazards and to appropriate precautions and preventative measures is essential. Before ordering, testing, loading, or using these catalysts, be sure to obtain available information on health, safety, and environmental hazards, precautions and preventative measures from your CRITERION Catalysts Representative.

## **ADDITIONAL INFORMATION**

All catalyst information supplied by CRITERION is considered accurate but is furnished with the express understanding that the customer receiving such information shall make its own assessments to determine suitability of such information for customer's particular purpose. All purchases of catalyst from CRITERION are subject to CRITERION's standard terms and conditions of sale (including CRITERION's product warranties) set forth in a sales proposal, sales contract, order acknowledgement, and/or bill of lading.

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