

0.3% Pt /AT Selectoxo R4754

Selectoxo

BASF Selectoxo is a Pt based catalyst in tablet form to selectively convert CO with O₂ in the presence of H₂.

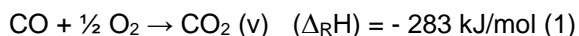
General

Selectoxo is a catalyst in the form of tablets with a nominal size of 3 x 3 mm and with Platinum as active component. In addition, a promoter modifies the activity of the Pt to allow for selective conversion of CO in the presence of H₂.

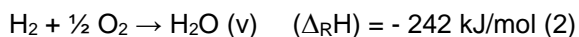
Product Application

Selectoxo was originally developed as a complement to methanation in ammonia plants.

Selectoxo is used to remove carbon monoxide from hydrogen streams by conversion with oxygen according to the following chemical formulae



Due to its modification, the catalyst can suppress as far as possible the reaction of hydrogen with oxygen, which can be described by the following reaction



Oxygen is added close to the stoichiometric needed amount compared to carbon monoxide.

Due to the high exotherm of reaction (1) and (2), proper instrumentation and safety measures always need to be put in place to assure full control of the reaction.

Typical reaction temperatures are in the range of 40 – 100°C / 100 – 210°F to allow for best selectivity. The maximum allowable temperature is 400°C / 750°F.

Special Operations

Selectoxo might gain maximum activity via a short activation procedure. Before unloading, the material should be oxidized.

Poisons

Selectoxo will last for very long times if it is not subjected to poisoning by certain impurities. The principal poisons are sulfur and chlorine compounds as well as oil. These materials will deactivate and may eventually poison the catalyst permanently.

Storage

Selectoxo does not deteriorate or constitute any hazard when stored in sealed containers. The containers should not be allowed to become damp or wet and should not be stored in contact with organic or easily oxidizing vapors.

Target Properties

Chemical Composition (dry basis)	0.3 % wt./wt. Pt and promoter on Alumina
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Typical Physical Properties

Packed Bulk Density, g/ml	1.05
Total Surface Area (BET), m ² /g	90

Packaging

- 120 l cardboard drum with up to 100 kg net

Point of Shipment

- Rome, Italy

About Us

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