

# 0.4% Pt 0.1% Rh/AT R4924

## DeOxo MF

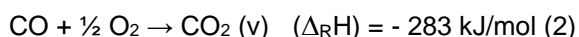
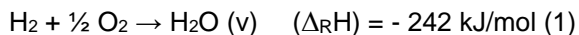
**BASF DeOxo MF / R4924 is a bi-metallic catalyst in tablet form to remove H<sub>2</sub> and CO, but also hydrocarbons from different industrial gases like CO<sub>2</sub> and O<sub>2</sub> streams.**

### General

DeOxo MF/R4924 is a catalyst in the form of tablets with nominal 3 x 3 mm size and with Platinum and Rhodium as active components. The carefully selected surface area carrier allows for high activity and high temperature stability.

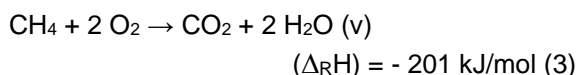
### Product Application

DeOxo MF is used to promote the catalytic conversion of hydrogen and carbon monoxide according to the following chemical formulae



This can be achieved by adding oxygen in over-stoichiometric amount.

The catalyst shows also very good activity for the conversion of hydrocarbons like methane. The reaction can be described according to the following chemical formula



Due to the high exotherm of reactions (1) - (3), 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 130 – 300°C / 265 – 570°F. The maximum allowable temperature is 500°C / 930°F.

### Special Operations

DeOxo MF/R4924 might gain maximum activity via a short activation procedure. Before unloading, the material should be oxidized.

### Poisons

DeOxo MF/R4924 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

DeOxo MF/R4924 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

<b>Chemical Composition (dry basis)</b>	0.4 % wt./wt. Pt and 0.1 % wt./wt. Rh on Alumina
---	--

### Typical Physical Properties

Packed Bulk Density, g/ml	0.65
---------------------------	------

Total Surface Area (BET), m <sup>2</sup> /g	90
---	----

### Packaging

- 32 l fiber drum with up to 30 kg net
- 213 l steel drum with up to 200 kg net

### Point of Shipment

- Rome, Italy

## About Us

BASF's Catalysts division is the world's leading supplier of environmental and process catalysts. The group offers exceptional expertise in the development of technologies that protect the air we breathe, produce the fuels that power our world and ensure efficient production of a wide variety of chemicals, plastics and other products, including advanced battery materials. By leveraging our industry-leading R&D platforms, passion for innovation and deep knowledge of precious and base metals, BASF's Catalysts division develops unique, proprietary solutions that drive customer success.

**BASF - We create chemistry**

### Americas

BASF Corporation  
25 Middlesex/Essex Turnpike  
Iselin, New Jersey, 08830, USA  
Tel : +1-732-205-5000  
Fax: +1-732-205-7725  
Email: [catalysts-america@basf.com](mailto:catalysts-america@basf.com)

### Asia Pacific

BASF (China) Company Limited  
300 Jiang Xin Sha Road,  
Pudong, Shanghai 200137  
P.R. China  
Tel: +86-21-2039 2549  
Fax: +86-21-2039 4800-2549  
Email: [catalysts-asia@basf.com](mailto:catalysts-asia@basf.com)

### Europe, Middle East, Africa

BASF De Meern BV Catalysts  
The Netherlands  
Tel: +31-30-666 9437  
Email: [catalysts-europe@basf.com](mailto:catalysts-europe@basf.com)

Although all statements and information in this publication are believed to be accurate and reliable, they are presented gratis and for guidance only, and risks and liability for results obtained by use of the products or application of the suggestions described are assumed by the user. NO WARRANTIES OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE MADE REGARDING PRODUCTS DESCRIBED OR DESIGNS, DATA OR INFORMATION SET FORTH. Statements or suggestions concerning possible use of the products are made without representation or warranty that any such use is free of patent infringement and are not recommendations to infringe any patent. The user should not assume that toxicity data and safety measures are indicated or that other measures may not be required. © 2015 BASF