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## Product Data Sheet

# Deoxo™ 45084

0.15% Palladium with 0.15% Platinum on alumina spheres

BASF **Deoxo 45084** is used for CO<sub>2</sub> or N<sub>2</sub> purification in polyethylene terephthalate (PET) solid state polycondensation units.

### Product Applications

Deoxo 45084 catalyst is used to promote the catalytic combustion of traces of ethylene glycol, acetaldehyde, dimers and light oligomers coming from the solid state polycondensation of polyethylene terephthalate (PET).

Low levels of H<sub>2</sub> will also be removed to form CO<sub>2</sub> and water vapor.

### Poisons

The catalyst will last indefinitely provided that it is not subjected to poisoning by certain impurities. The principal poisons are sulphur, arsenic-antimony-silicon compounds, chlorine compounds, oil mist from compressors, unsaturated hydrocarbons and the vapors of some organic solvents. These materials will deactivate and may eventually poison the catalyst permanently.

Water vapor itself does not affect the catalytic properties but if the gas is saturated with water vapor and the temperature is such that condensation occurs, the catalyst may be temporarily inhibited. This can be overcome by raising the temperature of the catalyst bed.

### Storage

Deoxo 45084 catalyst 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 oxidized vapors. Compounds containing sulphur or heavy metals may poison the catalyst.

#### Typical Properties

Alumina, wt%	> 99
Size, mm	2.4 – 4
Bulk Density, g/ml	0.66
Pore Volume, ml/g	0.3
Bulk Crush Strength, N	> 55
BET Surface Area, m <sup>2</sup> /g	90

## About Us

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