

Ammonia Reforming Catalyst

Ammonia (NH₃) is expected to have potential as a hydrogen carrier as well as a zero-emission fuel that, similar to hydrogen, does not emit carbon dioxide during combustion.

We provide ammonia reforming catalysts that decomposes ammonia to generate hydrogen, as well as catalysts for suppressing and decomposing nitrogen oxides (NO_x) and nitrous oxide (N₂O) in exhaust gas containing ammonia.

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Hydrogen (H₂), which serves as fuel, is generated from ammonia (NH₃)

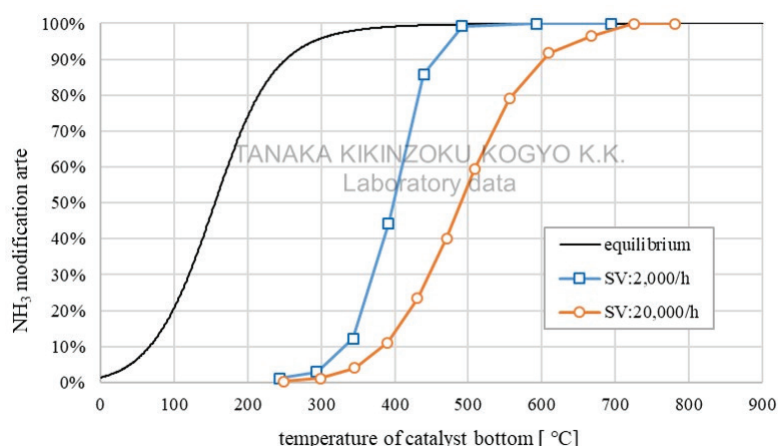
Reaction formula: $2\text{NH}_3 \rightarrow \text{N}_2 + 3\text{H}_2$

Features:

- High durability from use of precious metals
- High catalytic activity can be maintained even with low precious metal content, enabling the supply of catalysts at low cost



Ammonia reforming reaction characteristics



Test Condition

Item	Value (Unit)
Gas Type	NH ₃
SV(wet)	2,000 /h 20,000 /h

Hydrogen generation by reforming ammonia is possible at low temperatures

※Data for reference from laboratory experiments

※This is approximate data as results are affected by factors such as catalyst evaluation conditions, manufacturing conditions, and usage environment.

※ Inquire with us for the following catalyst as well.

Ammonia purification catalyst: Reaction formula $4\text{NH}_3 + 3\text{O}_2 \rightarrow 2\text{N}_2 + 6\text{H}_2\text{O}$ (Suppress generation of harmful nitrogen oxides (NO_x and N₂O))

Nitrogen oxides removal catalyst: Reaction formula $4\text{NO} + 4\text{NH}_3 + \text{O}_2 \rightarrow 4\text{N}_2 + 6\text{H}_2\text{O}$

Inquiries

TANAKA PRECIOUS METAL TECHNOLOGIES Co., Ltd.

Tap here to inquire at: <https://tanaka-preciousmetals.com>

Scan QR code to send in your inquiries, or reach out to your appointed sales representative.

