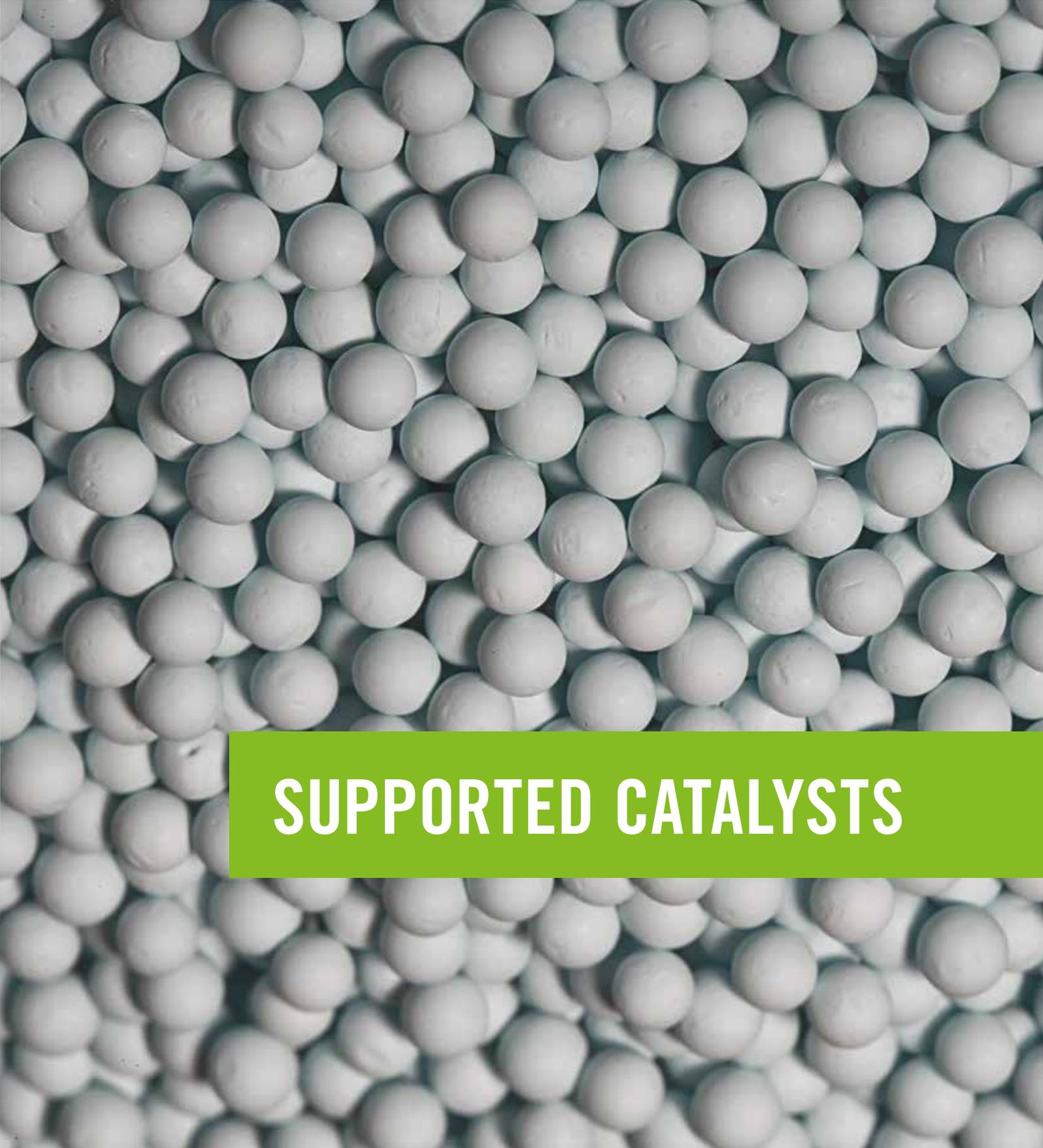


Heraeus



SUPPORTED CATALYSTS

SUPPORTED CATALYSTS

More than 80 percent of all reactions in the chemical industry are realized with the help of catalysts. Heraeus has many years of expertise specializing in heterogeneous catalysts. We are able to support our customers with technical solutions along the entire value chain.

Due to the multitude of precious metal compounds which we have developed ourselves, the use of various impregnation technologies and the many support media available, we can manufacture a huge variety of catalysts. Our expertise lies in the selection of the best catalyst with the highest efficiency.

As an independent catalyst supplier with more than 50 years of experience, we are not a competitor but a partner. We collaborate closely with our customers to optimize or develop the ideal catalyst for their applications. As a reliable partner, we stand for long-term relationships and increase our customers' process efficiency through our experience and technical expertise in the field of supported catalysts.

CUSTOMIZED SOLUTIONS

Many chemical and physical parameters can affect a catalyst. For this reason, we offer our customers expert advice to identify the best catalyst for a specific process. In many cases, very good results can be obtained with a standard catalyst product. Customer-specific solutions that go beyond a standard product require individualized catalyst optimization. Targeted selection of the best catalyst with the highest efficiency – that's what we do!



SERVICES

SCREENING

We are able to conduct comprehensive chemical and physical property determinations in our laboratories using in-house testing equipment. The scope of this work includes measurements of precious metal concentration, specific and precious metal surface areas, activity, selectivity, bulk density, particle size and mechanical strength.

PRECIOUS METALS TRADING

Through our trading centers in Hanau (Germany), New York City, Shanghai and Hong Kong, we are able to execute precious metal trades under current market conditions. In addition to sales and purchasing transactions, we can provide financing options with our customers based on precious metal leasing.

PRECIOUS METALS RECYCLING

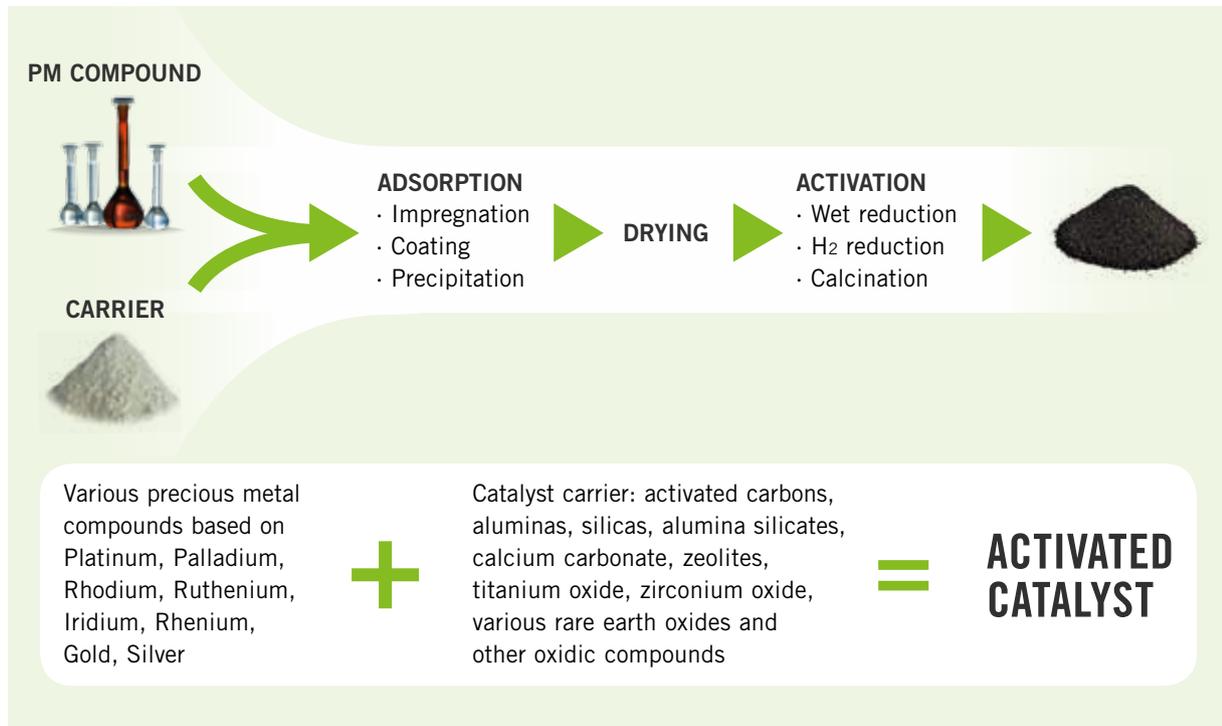
As specialists in the handling of spent precious metal catalysts, we offer the fastest possible precious metal recovery with highest yield. The reclaimed precious metal can be used again for the manufacture of new catalysts.

TOLL PRODUCTION

In addition to customized catalysts, we also offer contract manufacturing of precious metal catalysts on different substrates according to match customer formulations under toll contracts.

COATING PROCESS

The production of catalysts is a sensitive process in which each step has a direct effect on the quality of the catalyst. During the manufacture of a catalyst, a support material more or less inert to the reaction conditions is coated with the catalytically active substance in the form of an aqueous solution. The coating of precious metal compounds on support material is our expertise!



APPLICATION EXAMPLES



Throughout the world, Heraeus catalysts are used in the chemical, petrochemical and pharmaceutical industry. They also play an important role in the purification of industrial gases and exhausts.

PRODUCTION OF CHEMICALS

- Caprolactam/Nylon Production
- H₂O₂ Production
- Petrochemistry

GAS PURIFICATION

- High Purity Gases
- VOC Reduction
- N₂O Decomposition
- PET and PTA Production
- CO₂ Purification

SPECIAL CATALYSTS e.g. Hydrazine Decomposition



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