Precious Metal Chemicals: Ashby & Karstedt Catalysts
Your benefits

Products
We offer a wide range of homogeneous catalysts and heterogeneous catalyst precursors for industrial applications.

Development
Can’t find what your looking for? Let us help – give us a call.
Tel: +1-800-336-8559

Analytical Expertise
Our analytical laboratories around the world are working relentlessly to give you peace of mind. The quality of products supplied or the accuracy and transparency of spent catalyst settlements – we have you covered.

Resource Recovery
At the end of your catalyst life cycle, you want your precious resources recovered quickly, and at competitive terms.

We can help with that – worldwide, at competitive rates and with sustainability in mind.

Metal Trading
With our portfolio comes access to one of the world’s largest precious metal trading organizations.

Buying, selling, hedging, leasing… find it all here.

Global Presence
Globally operating companies need globally operating partners.

Wherever you go, chances are you will find us there, ready to help.
Silicone rubber is an elastomer composed of silicone — itself a polymer — containing silicon together with carbon, hydrogen, and oxygen and was first described in 1901 by the British chemist Frederic S. Kipping. They are a common feature in many industries like adhesives, automotive, aerospace, cookware, dental, electronics, and many more.

One of the various curing methods for silicones is hydrosilylation, utilizing vinyl containing silicones, hydrosilane materials, and platinum-based compounds as catalysts. A typical system for liquid silicone rubbers (LSR) requires the mixing of two separate components, often in combination with fillers, colorants, and further additives. The formulated, viscous but pumpable components can be used in extrusion or injection molding.

Curing can be completed in as little as a few seconds at temperatures between 120 and 200 °C. The most common curing agents for hydrosilylation are finely dispersed Pt(0), either as Karstedt’s catalyst in a linear or as Ashby’s catalyst in a circular siloxane matrix. Those catalysts are usually mixed into the final rubber components in a concentration range from 5 – 200 ppm depending on the desired curing rate and process speed.

BASF offers both Karstedt and Ashby catalysts in various concentrations and diluants (e.g. various vinyl-terminated siloxanes, xylene, IPA), which can be optimized for your system. We consider it important to offer catalysts with an adjustable curing rate and minimal turbidity of the catalyst solutions to ensure that the customer can realize complete curing and the often-desired high transparency of their product. To achieve those qualities BASF builds on its expertise in precious metal chemistry, a unified global product supply, and customer-oriented bottling and dispensing.

### Ashby & Karstedt Catalysts

<table>
<thead>
<tr>
<th>Catalyst</th>
<th>Pt Concentration</th>
<th>Pt Range</th>
<th>Dilutant</th>
<th>CAS Number</th>
<th>Product Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Karstedt</td>
<td>20%</td>
<td>19 – 21.5%</td>
<td>DVTMS</td>
<td>68478-92-2</td>
<td>PMC3219</td>
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<tr>
<td>Karstedt</td>
<td>10%</td>
<td>9.7 – 10.3%</td>
<td>DVTMS</td>
<td>68478-92-2</td>
<td>PMC3218</td>
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<tr>
<td>Karstedt</td>
<td>2%</td>
<td>1.8 – 2.2%</td>
<td>1,000 cSt</td>
<td>68478-92-2</td>
<td>PMC3209</td>
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<tr>
<td>Karstedt</td>
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<td>1.8 – 2.2%</td>
<td>Xylene</td>
<td>68478-92-2</td>
<td>PMC3221</td>
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<tr>
<td>Ashby</td>
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<td>1.8 – 2.2%</td>
<td>TVTMS</td>
<td>68585-32-0</td>
<td>PMC3211</td>
</tr>
</tbody>
</table>

### Benefits

- Available in various concentrations and diluants
- Adjustable curing rate
- Minimal turbidity of the catalyst solutions

BASF also offers Ashby’s catalyst as 2% Pt Clear and cloudy.
Precious Metal Chemicals

Catalysts drive performance. Whether you specialize in industrial or fine chemicals, pharmaceuticals, petrochemicals or fuel cells, our compounds and solutions consistently provide high performance standards you can rely on. Our global network of production sites has you covered, no matter where you operate. With laboratories around the world, we guarantee a smooth development process.

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

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