



**BASF**  
We create chemistry

**ENGELHARD**  
Materials Services

## 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 you're 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.



# Ashby & Karstedt Catalysts

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

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.

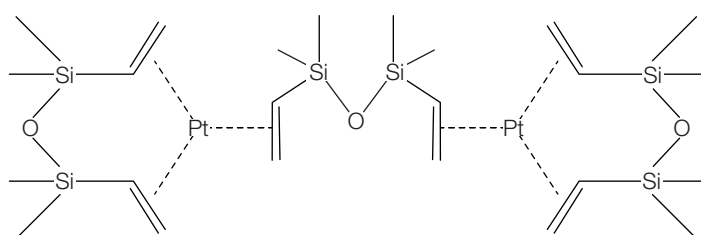
BASF offers both Karstedt and Ashby catalysts in various concentrations and dilutants (e.g. various vinyl-terminated siloxanes, xylene, IPA), which can be optimized for your system. We consider it important to offer catalysts with an adjustable curing rate and minimal turbidity of the catalyst solutions 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.

## Benefits

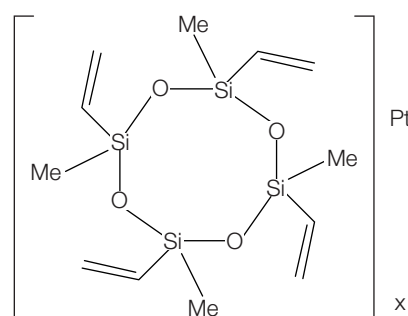
- Available in various concentrations and dilutants
- Adjustable curing rate
- Minimal turbidity of the catalyst solutions



2% Pt Clear and cloudy



Karstedt's Catalyst



Ashby's Catalyst

## 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

### Our Team



**Nancy Ren**  
Asia & Australia  
Tel: +86-186-1679-6276



**Adam Lazewski**  
Americas  
Tel: +1-248-205-6120



**Ben Browning**  
Europe & Africa  
Tel: +44-7767-006430

### Americas

**BASF Corporation**  
554 Engelhard Drive  
Seneca, SC 29678-1700, USA  
Toll free: +1-800-336-8559

### Europe, Middle East, Africa

**BASF Italia S.r.l.**  
Divisione Catalizzatori  
Via di Salone, 245  
00131, Rome, Italy  
Tel: +39-06-41992-2289

### Asia Pacific

**BASF Chemical Company Limited**  
8 Chu Hua Road 201507  
Shanghai, P.R. China  
Tel: +86-21-6758-1176

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 EXPRESSED 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.