Metals Scavenging Agents
Metals removal for hetero/homogeneous applications

BASF
The Chemical Company
How important is product purity?
New regulations requiring manufacturers to isolate single isomers are leading to an increased reliance on catalysts. To minimize the potential for costly delays and ensure regulatory approval, manufacturers must find more effective ways to remove metal remains and control residual metal impurity levels.

Destination: BASF

When speed to market, cost-effectiveness, and product uniqueness are imperative – BASF has long been an industry leader in providing cutting-edge catalytic technologies to pharmaceutical and fine chemicals markets.

Our chemical process expertise continues the advancement of technologies which add maximum value to downstream pharmaceutical and fine chemicals customers – addressing both their development and post-launch market requirements.

With a dedicated global network of management, lab, research, and manufacturing resources, we pride ourselves on understanding customer processes and needs.

Building on our core competencies in materials science and surface chemistry, BASF is proud to introduce our new line of Metals Scavenging Agents (MSAs) for the removal of metal remains in the pharmaceutical and fine chemicals industries.

The challenge

As the use of catalysts grows, researchers and manufacturers are increasingly faced with the problem of minimizing residual metal impurity levels to ensure regulatory approval. Traditional methods, such as distillation and re-crystallization, can be costly, complicated, and ultimately, simply ineffective.

The BASF solution

BASF solves the challenge of metals removal and the need for enhanced product purity with its new line of metals scavenging agents (MSAs), specifically designed for pharmaceutical and fine chemicals applications.

BASF MSAs are designed to be easier to use, more effective, and more robust across a wider variety of process conditions than traditional methods of product purification.

Did you know...

Due to intense competition, for each day the launch of a successful new drug is delayed, it can cost its manufacturer millions in lost revenue.
Results and the reaction environment

BASF MSAs are free-flowing powders made from a variety of proprietary substrate materials. Effective on both precious and base metals with loading capacities up to 13% (depending on metal and process conditions), MSAs are designed for fixed-bed or slurry applications, employing polar or apolar solvents (either aqueous or organic) that require temperature stability up to 150ºC. The result? BASF MSAs perform over the broad spectrum of operating environments, making it a truly flexible solution for your metals removal needs.

Availability

- Research quantities are available through Strem Chemicals, Inc. on the web at www.strem.com/msa.
- Commercial quantities are available directly from BASF by calling one of the regional offices below:
  - Americas: +1-973-245-7447
  - Europe: +39 064 199 2605
  - Asia: +91 222 616 4159

BASF – The name inside the solution

BASF Corporation is a surface and materials science company focused on technologies that dramatically improve products and processes. We are a global leader in providing superior technologies for environmental, process, appearance and performance applications.

- “One-stop” integrated resource furthers our ability to develop and customize products rapidly and cost-effectively within a sound scientific framework. While our roots are in science, our success comes from blending technology and ingenuity in a way that continues to raise the bar and drive innovation for us and our customers.
- Our global infrastructure allows us to serve our business customers regardless of their location.
- Research and development centers strategically located in the U.S., Asia and Europe position BASF to address the unique local requirement of businesses worldwide.

Quick facts

<table>
<thead>
<tr>
<th>METALS REMOVED</th>
<th>Pt, Pd, Rh, Ru, Ir, Ni, Cu, Fe</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loading capacity</td>
<td>≤13%</td>
</tr>
<tr>
<td>APPLICATIONS</td>
<td>Fixed-bed / Slurry</td>
</tr>
<tr>
<td></td>
<td>Polar / Apolar solvents</td>
</tr>
<tr>
<td></td>
<td>Aqueous / Organic solutions</td>
</tr>
<tr>
<td>TEMPERATURE stability</td>
<td>150ºC</td>
</tr>
</tbody>
</table>

To learn more about how BASF metals scavenging agents can help you resolve your business challenges, contact us by e-mail at chemicals@basf.com or visit us at www.basf-catalysts.com.
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 EXPRESS 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.