HDK® PRESSED GRADES – THE LIGHTWEIGHT HEAVYWEIGHT

HDK® from WACKER was developed to perform at its best every day. Whether in the pharma or packaging industry, renewable energy or construction sector: HDK® pyrogenic silica is a true all-rounder and is used in a wide range of applications and industries. HDK® pyrogenic silica improves the performance, stability and handling of your solutions and formulations in all phases of production and processing. HDK® is ideal for adjusting the flow properties of liquids and giving powders optimum free-flow properties. So is it really a heavyweight? In regard to value and performance, definitely. But in regard to its actual weight, definitely not. Read on.

HDK® is a registered trademark of Wacker Chemie AG.
HYDROPHILIC, PRESSSED HDK® GRADES

The Cost-Saving Alternative

Pressed HDK® has more than double the tamped density of its uncompressed counterpart. Yet it retains the material’s crucial benefits, such as high surface area and superior purity. The higher bulk density improves product handling and logistics.

**Lower Usage**
Pressed HDK® reduces the powder volume that needs to be compounded into your formulations. Thus, incorporation times are reduced and the formulation process is more efficient.

**Less Storage Space**
Because a bag of pressed HDK® contains significantly more weight, you gain valuable storage space.

**Double Density**
Pressed HDK® grades are mechanically compressed after production, increasing its tamped density from approximately 40 to 100 g/l.

**Lower Logistics Costs**
Since a greater quantity of pressed HDK® can fit into a truck, shipping costs are lower than for non-pressed grades.

**More HDK® per Bag**
Due to the pressing, a bag of the same size can hold twice as much weight. You can get a 20 kg bag of HDK® N20P instead of a regular 10 kg bag HDK® N20.

**Less Dust**
Pressed HDK® forms less dust during handling and product losses due to dust formation are reduced.

**Less Cleaning**
Less dust means less cleaning is required. Consequently, the ventilation of working areas can be reduced.

**Less Waste**
More HDK® in a bag means that less packaging material is needed and correspondingly less waste is generated – this saves resources and reduces costs and environmental pollution.

**More Sustainability**
Since a ship- or truckload holds more HDK®, the carbon footprint is lower compared to uncompressed HDK®.

<table>
<thead>
<tr>
<th>HDK® Hydrophilic Grades</th>
<th>Pressed Types</th>
<th>V15P</th>
<th>N20P</th>
<th>T30P</th>
<th>T40P</th>
<th>N20PPharma</th>
</tr>
</thead>
<tbody>
<tr>
<td>BET surface area</td>
<td>m²/g</td>
<td>130–170</td>
<td>175–225</td>
<td>270–330</td>
<td>360–440</td>
<td>172–225</td>
</tr>
<tr>
<td>pH in 4% dispersion</td>
<td>approx.</td>
<td>4.1</td>
<td>4.1</td>
<td>4.1</td>
<td>4.1</td>
<td>4.1</td>
</tr>
<tr>
<td>Tamped density</td>
<td>g/l</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
<tr>
<td>Loss on drying, ex works (2 h at 105°C)</td>
<td>wt. %</td>
<td>&lt;1.0</td>
<td>&lt;1.5</td>
<td>&lt;1.5</td>
<td>&lt;1.5</td>
<td>&lt;1.5</td>
</tr>
<tr>
<td>Sieve residue</td>
<td>wt. %</td>
<td>&lt;0.03</td>
<td>&lt;0.03</td>
<td>&lt;0.03</td>
<td>&lt;0.03</td>
<td>&lt;0.03</td>
</tr>
</tbody>
</table>

Note: these figures are intended as a guide and should not be used in preparing specifications.

**Pyrogenic Silica with Personalized Service**
Profit from our decades of experience, vertically integrated production and hands-on technical expertise. We help you find the perfect solution for your specific requirements, be it by modifying a product or testing and analyzing different dosages of HDK® in your formulation. For more information or assistance, please contact us via e-mail. Our support team will be happy to advise you.

Wacker Chemie AG, Hanns-Seidel-Platz 4, 81737 Munich, Germany
Phone: +49 89 6279-1741, Fax: +49 89 6279-1770

The data presented in this medium are in accordance with the present state of our knowledge but do not absolve the user from carefully checking all supplies immediately on receipt. We reserve the right to alter product constants within the scope of technical progress or new developments. The recommendations made in this medium should be checked by preliminary trials because of conditions during processing over which we have no control, especially where other companies’ raw materials are also being used. The information provided by us does not absolve the user from the obligation of investigating the possibility of infringement of third parties’ rights and, if necessary, clarifying the position. Recommendations for use do not constitute a warranty, either express or implied, of the fitness or suitability of the product for a particular purpose.