High chroma pigments for majestic effects
Lumina® Royal Exterior Blue
Lumina® Royal
Exterior Blue EH 402 (6803H)*

While color and effects are often used to add unique style to exterior coatings, innovative pigments create true differentiation. Lumina Royal Exterior Blue enables extreme effect shades that are not possible with other pigments. Because of its exceptional high chromaticity, Lumina Royal Exterior Blue can be used at reduced levels in standard effect shades, to improve the physical properties of the coating.

BASF's Chrome Free Surface treatment (CFS) for improved humidity resistance allows application in the most demanding exterior applications, including automotive, coil and powder coatings.

Applications
Exterior coatings for:
- Automotive
- Building and construction
- Powder and coil coatings

Benefits
- The highest chromaticity and reflective interference blue available.
- New styling options and greater formulation flexibility.
- Better color purity, brightness and luster compared to pigments of the same class.
- The option to use reduced levels in standard effect shade formulations.

* Standardization in progress. The final code after standardization will be 6803H.
### Technical data

#### Lumina Royal Exterior Blue

<table>
<thead>
<tr>
<th>Chemical composition (% by weight)</th>
<th>Mica</th>
<th>TiO&lt;sub&gt;2&lt;/sub&gt; (Rutile)</th>
<th>SnO&lt;sub&gt;2&lt;/sub&gt; (amorphous)</th>
<th>SiO&lt;sub&gt;2&lt;/sub&gt; (amorphous)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>53.7%</td>
<td>27.4%</td>
<td>1.6%</td>
</tr>
<tr>
<td>Surface treatment</td>
<td>Polymer</td>
<td>2.5%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical form</td>
<td>White powder</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical data*</td>
<td>pH¹</td>
<td>Conductivity¹</td>
<td>Bulk volume</td>
<td>Density</td>
</tr>
<tr>
<td>(10% eq. suspension)</td>
<td>²</td>
<td>(by weight)</td>
<td>³</td>
<td>³</td>
</tr>
<tr>
<td></td>
<td>7.7</td>
<td>31.6 µS/cm</td>
<td>1.8 l/kg</td>
<td>2.84 g/cm³</td>
</tr>
<tr>
<td>Particle size distribution**</td>
<td>d&lt;sub&gt;10&lt;/sub&gt;</td>
<td>d&lt;sub&gt;50&lt;/sub&gt;</td>
<td>d&lt;sub&gt;90&lt;/sub&gt;</td>
<td>10 µm</td>
</tr>
<tr>
<td>Fastness to solvents</td>
<td>Practically insoluble in all solvents</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemical resistance</td>
<td>HCl (2%)</td>
<td>No change</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chemical resistance (in coatings)</td>
<td>NaOH (2%)</td>
<td>No change</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heat stability</td>
<td>&gt; 200°C</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weathering data***</td>
<td>2 years Florida</td>
<td>Ongoing</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Accelerated 4800 h</td>
<td>OK</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humidity resistance****</td>
<td>gloss and DOI after 24 h 100% cross hatch after 1 h 0</td>
<td>No whitening</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

*Physical data determined at lot 207553
**Particle size distribution (Vol %) determined with Mastersizer 2000 Ver 5.12G (Malvern Instruments)
***Test in a black reduction (pigmentation 90 pts. EH 402 + 10 pts. FW 200) acc. DIN EN ISO 4892-2
****Test in a black reduction (pigmentation 90 pts. EH 402 + 10 pts. FW 200, solvent-borne basecoat/clearcoat)
Contact Worldwide

North America
Tel: +800 962 7829
Fax: +800 971 1123

Europe
Tel: +49 621 60 73873
Fax: +49 621 60 72869

Eastern Europe, Africa, West Asia
Tel: +49 621 60 76429
Fax: +49 621 60 6676429

South America
Tel: +55 11 3043 3637
Fax: +55 11 3043 3110

Asia
Tel: +852 2731 0111
Fax: +852 2731 5670

About BASF
BASF: The Chemical Company. We don’t make a lot of the products you buy. We make a lot of the products you buy better.

BASF is the world’s leading chemical company: The Chemical Company. Its portfolio ranges from chemicals, plastics, performance products, agricultural products and fine chemicals to crude oil and natural gas. As a reliable partner to virtually all industries, BASF’s high-value products and intelligent system solutions help its customers to be more successful. BASF develops new technologies and uses them to meet the challenges of the future and open up additional market opportunities. It combines economic success with environmental protection and social responsibility, thus contributing to a better future.

While the descriptions, designs, data and information contained herein are presented in good faith and are believed to be accurate, they are provided for your guidance only. Because many factors may affect processing or application/use, we recommend that you make tests to determine the suitability of a product for your particular purpose prior to use. 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, OR THAT THE PRODUCTS, DESIGNS, DATA OR INFORMATION MAY BE USED WITHOUT INFRINGING THE INTELLECTUAL PROPERTY RIGHTS OF OTHERS. IN NO CASE SHALL THE DESCRIPTIONS, INFORMATION, DATA OR DESIGNS PROVIDED BE CONSIDERED A PART OF OUR TERMS AND CONDITIONS OF SALE.

All trademarks are owned by BASF SE.
©2009 BASF Corporation

Visit us online at www.basf.com/pigment

BASF Corporation
100 Campus Drive
Florham Park, NJ 07932