



## CCR 150 TiO<sub>2</sub> - UV Absorber

**CCR 150** is a stabilized aqueous suspension of ultrafine Titanium dioxide (TiO<sub>2</sub>) with excellent UV absorption properties. Our applied proprietary particle design- and coatings- technology is the basis for the premium product performance in a wide range of applications where UV protection is required.

<p>Properties</p>	<p>Designed and optimized for the use as high efficient UV absorber:</p> <ul style="list-style-type: none"> <li>▪ Ultrafine TiO<sub>2</sub> without pigmentary properties.</li> <li>▪ Highly stabilized, neutral pH, slightly brownish aqueous suspension.</li> <li>▪ Rutile crystal structure.</li> <li>▪ Functionalized surface through inorganic coatings.</li> <li>▪ Excellent UV absorber, with high transparency.</li> </ul>		
<p>Applications</p>	<p>Main applications are:</p> <ul style="list-style-type: none"> <li>▪ Transparent coatings providing long term UV screening for various substrates (wood, plastics, etc.).</li> <li>▪ As a supplement to plastics in order to enhance their physical and chemical characteristics.</li> <li>▪ Transparent plastic foil for food packaging.</li> <li>▪ UV protection in polymers.</li> </ul>		
<p>Product characteristics (typical)</p>	<p><b>TiO<sub>2</sub> content</b></p>	<p>Internal method</p>	<p>15 - 17 %</p>
	<p><b>Density</b></p>	<p>Internal method</p>	<p>~ 1.1 g/cm<sup>3</sup></p>
	<p><b>pH</b></p>	<p>Internal method</p>	<p>6 - 8</p>
	<p><b>Crystallite size (Scherrer)</b></p>	<p>Internal method</p>	<p>~ 10 nm</p>
	<p><b>Specific Conductivity</b></p>	<p>Internal method</p>	<p>&lt; 1 mS/cm</p>
	<p><b>Surface treatment</b></p>	<p>Internal method</p>	<p>Al<sub>2</sub>O<sub>3</sub> , Fe<sub>2</sub>O<sub>3</sub></p>
	<p><b>Specific surface area</b></p>	<p>Internal method</p>	<p>~ 140 m<sup>2</sup>/g</p>
<p>SEM image &amp; Performance chart</p>	<div style="display: flex; justify-content: space-around;"> <div data-bbox="536 1290 932 1585"> <p>SEM image of the CCR 150</p> </div> <div data-bbox="970 1290 1452 1585"> <p>Absorption curve of the CCR 150</p> </div> </div> <p>Preparation method: The 200 microns liquid films were prepared from water based wood coating containing 0.6 % of active component. The films were dried on room temperature for 24 hours. Final step, the transmitted light on UV-Vis spectrophotometer was measured.</p>		
<p>Packaging &amp; Handling</p>	<ul style="list-style-type: none"> <li>▪ Available in 50 L (60 kg) or 150 L (170 kg) plastic drums.</li> <li>▪ Handling in accordance with the CCR 150 Safety Data Sheet.</li> <li>▪ Shelf life: at least 2 years from the date of production.</li> <li>▪ When stored, avoid freezing and overheating.</li> <li>▪ Be sure to mix before use (after mixing viscosity will be lower).</li> </ul>		

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