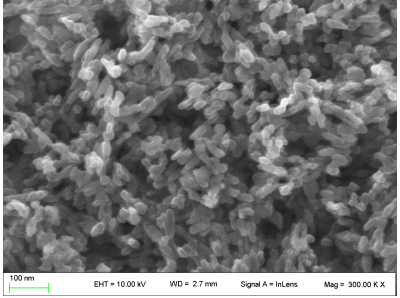
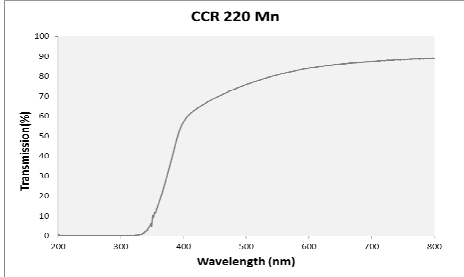




CCR 220 Mn TiO₂ - UV Absorber

CCR 220 Mn is a stabilized aqueous suspension of ultrafine Titanium dioxide (TiO₂) 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"> ▪ Ultrafine TiO₂ without pigmentary properties. ▪ Highly stabilized, neutral pH, skin color aqueous suspension. ▪ Rutile crystal structure. ▪ Functionalized surface through inorganic coatings. ▪ Excellent UV absorber, with high transparency. ▪ Cristal lattice doped with Mn. 		
<p>Applications</p>	<p>Main applications are:</p> <ul style="list-style-type: none"> ▪ Transparent coatings providing long term UV screening for various substrates (wood, plastics, etc.). ▪ As a supplement to plastics in order to enhance their physical and chemical characteristics. ▪ Transparent plastic foil for food packaging. ▪ UV protection in polymers. 		
<p>Product characteristics (typical)</p>	<p>TiO₂ content</p>	<p>Internal method</p>	<p>15 - 17 %</p>
	<p>Density</p>	<p>Internal method</p>	<p>~ 1.1 g/cm³</p>
	<p>pH</p>	<p>Internal method</p>	<p>6 - 8</p>
	<p>Crystallite size (Scherrer)</p>	<p>Internal method</p>	<p>~ 30 nm</p>
	<p>Specific Conductivity</p>	<p>Internal method</p>	<p>< 1 mS/cm</p>
	<p>Surface treatment</p>	<p>Internal method</p>	<p>Al₂O₃</p>
	<p>Specific surface area</p>	<p>Internal method</p>	<p>~ 70 m²/g</p>
<p>SEM image & Performance chart</p>	 <p>SEM image of the CCR 220 Mn</p>		 <p>Absorption curve of the CCR 220 Mn</p> <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 & Handling</p>	<ul style="list-style-type: none"> ▪ Available in 50 L (60 kg) or 150 L (170 kg) plastic drums. ▪ Handling in accordance with the CCR 220 Mn Safety Data Sheet. ▪ Shelf life: at least 2 years from the date of production. ▪ When stored, avoid freezing and overheating. ▪ Be sure to mix before use (after mixing viscosity will be lower). 		

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