Metalurško kemična industrija Celje, d.d.
Kidričeva 26
SI-3001 Celje
Slovenija

t 00386 (0)3 427 60 00
f 00386 (0)3 427 62 92
e info@cinkarna.si
w www.cinkarna.si

CCR 150

TiO_2 - UV Absorber

CCR 150 is a stabilized aqueous suspension of ultrafine Titanium dioxide (TiO_2) 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.

Properties

Designed and optimized for the use as high efficient UV absorber:

- Ultrafine TiO_2 without pigmentary properties.
- Highly stabilized, neutral pH, slightly brownish aqueous suspension.
- Rutile crystal structure.
- Functionalized surface through inorganic coatings.
- Excellent UV absorber, with high transparency.

Applications

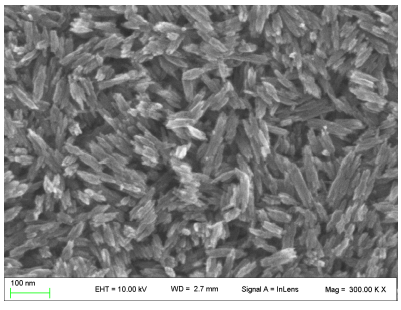
Main applications are:

- 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.

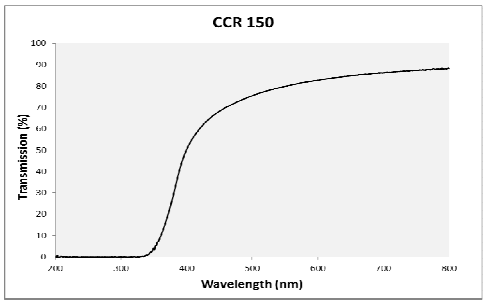
Product characteristics (typical)

TiO_2 content	Internal method	15 - 17 %
Density	Internal method	~ 1.1 g/cm^3
pH	Internal method	6 - 8
Crystallite size (Scherrer)	Internal method	~ 10 nm
Specific Conductivity	Internal method	< 1 mS/cm
Surface treatment	Internal method	Al_2O_3 , Fe_2O_3
Specific surface area	Internal method	~ 140 m^2/g

SEM image & Performance chart



SEM image of the CCR 150



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.

Absorption curve of the CCR 150

Packaging & Handling

- Available in 50 L (60 kg) or 150 L (170 kg) plastic drums.
- Handling in accordance with the CCR 150 Safety Data Sheet.
- Shelf life: 4 years from the date of production.
- When stored, avoid freezing and overheating.
- Be sure to mix before use (after mixing viscosity will be lower).