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## **LUXBLOCK 102Zn**

### **UV protector**

- ENCAPSULAE has developed LUXBLOCK 102Zn, based on an inorganic composite for use in the plastics sector. LUXBLOCK 102Zn does not affect the final coloration of the polymer since it is transparent. The particle size is outside the nanometric range (0-100nm) and provides a high level of protection against UVA and UVB radiation.
- It consists of a composite of TiO<sub>2</sub>, ZnO and SiO<sub>2</sub> developed with a patented technology that allows the filters to attain good coverage within the UV spectrum. The additive does not migrate as the organic filters do, so it is stable in the final formulation and does not lose its long-term effect.
- The particle size distribution was determined by Nanoparticle Tracking Analysis (NTA), a characterization technique that uses the light scattering properties and Brownian motion of the particles to determine their numerical particle size distribution.

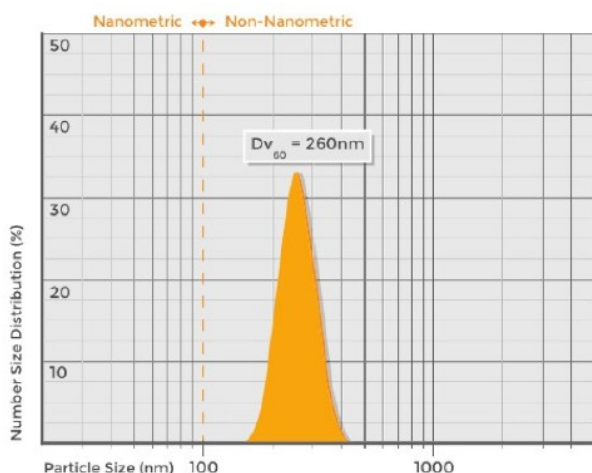


Fig. 1: Particle size distribution through NTA.

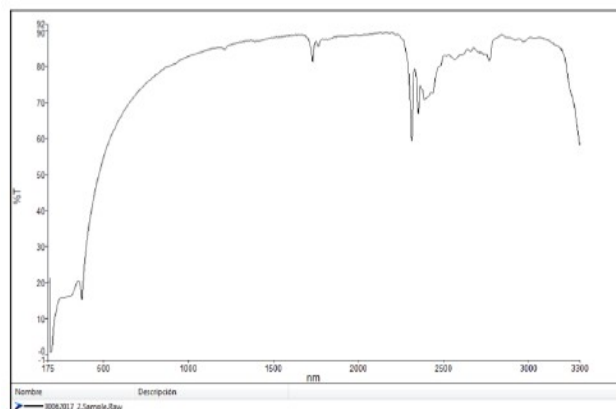


Fig. 2: Transmittance value at 1% charge in an LDPE polymer with a thickness of 90 microns.