

Absolute Black

posted on August 4 by **DesignAddict**.

[Grado Zero Espace](#) recently realized and commercialized a new category of material dedicated to industrial designers. The new materials has been called "Absolute Black" and it is based on carbon nanotubes.



Thanks to research activities performed by Grado Zero Espace on the integration of nanoparticles into different matrices, a new series of prototypes characterized by particular aesthetic effects has been developed. This job gave birth to "Absolute Black" brand, a process that allows to obtain various polymeric materials, containing variable percentages of Carbon Nanotubes (CNTs) and other micro sized fillers, able to absorb very well all the visible spectrum radiations.

To obtain a good "black" effect, Grado Zero Espace studied and searched for a pigment with proper composition (100% carbon), particle size (microns and nanometers), porosity (high surface area) and good ability to be integrated into the substrate. GZE used, hence, Carbon Nanotubes (CNTs), compounds made of only carbon atoms with a cylindrical structure composed by a sequence of hexagons (benzene). They appears like a very fine black powder totally insoluble, but it is possible to create a good dispersion of them into various matrices using proper techniques and additives.

Absolute Black is black inside and outside and, also after its scratching, it maintains its homogeneous black colour.

tags: [Grado Zero Espace](#), [new technologies](#)

producers: [Grado Zero Espace](#)

http://www.designaddict.com/design_addict/blog/index.cfm/2008/8/4/Absolute-Black