
THE MYTH ABOUT TOXICITY OF PURE FULLERENES IS IRREVERSIBLY DESTROYED

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In our report we present the facts which were the reason for erroneous conclusions about high toxicity of water nanodispersions of pristine fullerenes and which in 2004-2005 have intimidated the world with some toxic properties of fullerenes [1-7] that continues to mislead still both the scientific world and the public [8-11].

Scrupulous analysis of such facts testifies that authors who have discovered 'special' toxic properties of C₆₀ fullerenes, actually investigated the biological activity of both crystal-solvated forms of pristine C₆₀ which contained toxic molecules of organic solvent (THF) and/or products catalytic degradations of the last as well as chemically modified (oxidized) C₆₀ nanoparticles, but not pure fullerenes [10-17]. The criticism of hasty conclusions about fullerenes toxicity [8,12,15] stimulated new investigations, which have in essence denied previous statements about danger of fullerenes for living organisms and an environment [14-24].

Moreover, investigating pure fullerenes and their aqueous nanodispersions in the course of more than 12 years, we are constantly observing the unique and only positive effects of their biological activity [12 and <http://fullwater.com.ua>] that finds the strict confirmations in works made previously and now by other independent experts in fullerene sciences [15,19-24].

As a whole, pristine fullerenes do not constitute a few danger for living organisms, including the hazardous influence on environmental, and it is recommended to handle pure fullerenes in the same way as with usual carbon black.

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