
PS-022. Assessment of the legislation about biocidal products produced by nanotechnology in Turkey

Özlem Terzi, Elif Nur Köksal

Public Health Department, Medical Faculty, Ondokuz Mayıs University, Samsun Public Health Administration, Giresun

The aim of this study is to determine whether the legislations in Turkey include biocidal products produced by nanotechnology. The data were obtained from scientific articles and Official Gazette website. Results: In our daily life, due to their antibacterial and antifungal characteristics, nanoparticles (NP) derived from some metal and metal oxides are used in food and textile products as protector. In addition, antimicrobial features of biocidal products become more effective by means of nanotechnology. However, there are no standard risk assessment and technological classifications of nanomaterials (NM). Although their potential harmful effects are not fully known, a great number of studies have shown that they have negative effects on the environment and human health. Similarly, it's stated that due to the residues they leave after application, biocidal products that contain NM will have harmful effects in the long run. In order to minimize the possible effects of biocidals and to protect the environment and human health, Biocidal Product Regulation numbered 528/2012 has been issued by the European Union. In the aforementioned regulation, the definitions of "particle", "agglomerate" and "aggregate" were made in parallel with NM definition and subjects such as the process of the certification of biocidal products that contain NM, labeling the products, risk assessment and marketing were also addressed. In Turkey, legislations about biocidal products're practiced with "Biocidal Products Regulation" and "Regulations on the Procedures and Principles of Using Biocidal Products". It can be seen that in the most recent updated version of the aforementioned regulations (12/03/2014 and 15/03/2016, respectively) there are no regulations about products which have NM, NP or similar contents. Conclusion: It is recommended that the required legal regulations about biocidal products, which are used for antimicrobial purposes in products especially in the fields of health, food and textile, should be completed and put into practice as soon as possible

Keywords: biocidal, nanomaterial, nanotechnology, regulation