

O41. TATTOO INKS - THE VIEW OF A TOXICOLOGIST

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Millions of people have tattoos. The systemic effects of tattoo colorants are mostly unknown (<http://www.sciencedirect.com/science/article/pii/S014067361560215X>). The Council of Europe (CoE, www.coe.int) has established guidelines and negative lists for tattoo products in 2003 and 2008 (www.coe.int/t/e/social_cohesion/soc-sp/resap_2008_1%20e.pdf). The CoE established a list of 27 aromatic amines (negative list), which should neither be present in tattoos products nor released from tattoo colorants. However, tattoo colorants containing aromatic amines from the negative list established by the CoE are still used for tattoos.

Several tattoos are on the market, which contain carcinogenic compounds such as polyaromatic hydrocarbons or aromatic amines. Aromatic amines can be present as contaminants, or the aromatic amines can be released metabolically or through photo and laser degradation from tattoo colorants. Exposure to aromatic amines is a bladder cancer risk. Using the concept of the Environmental Protection Agency (U.S.A.) for the risk assessment of compounds present in the environment, people with tattoo colorants synthesized from aromatic amines have at least a comparable cancer risk (<http://ebph.it/article/view/12018>) such as meat consumer (<http://www.who.int/features/qa/cancer-red-meat/en/>).