



DEGRADATION OF IODINATED X-RAY CONTRAST MEDIA

Each year, over 3000 tons of X-ray contrast media are used by medical facilities across the globe. About 90 % of those contrast agents reach our environment largely unaltered through clarification plants. To the present day, degradation products of these substances, which would imply decomposition of the iodinated benzene by microorganisms, have not been identified in sewage sludge.

To estimate possible harmful effects on water and its organisms, toxicological tests with the nonionic iopromide were performed to investigate its effects on water organisms (water flea, two fish species, algae, bacteria) in an environment test system. No toxicological effects on *Daphnia magna* were observed for short-term (48 hours) exposure to high concentrations of 10g/l iopromide or long-term exposure (22 days) to lower concentrations of 1 g/l [16].

However, as long as no adequate data on long-term effects of XCM or their synergistic impact on water are available, negative effects cannot be ruled out.

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