









**Figure 5.** Possible degradation pathway of F-53B in UV/sulfite system.

F-53B is endowed with much better reducibility compared with PFOS due to the Cl atom replacement in the molecule. Consequently, its reducibility in real electroplating wastewater is greatly promoted relative to PFOS, and would make it more economical and efficient to remove F-53B from industrial effluent by integrating UV/sulfite process in current wastewater treatment units. As a potential alternative to PFOS, despite it is still oxidation-resistant, F-53B could be an ideal replacement for PFOS as CMS from reducibility perspective.

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