

<b>Chapter Remark</b>	<ul style="list-style-type: none"> <li>: 5</li> <li>: The solubility of 2,4DCP (4000 mg/L; 25 mM) and 2,4DCP-Na (7050 mg/L; 38 mM) indicate that both forms are freely soluble at the concentrations likely to be encountered in mammalian testing. Both chemical forms exhibit high solubility because they readily dissociate in aqueous solution. The aqueous dissociation constant (pKa) for 2,4-DCP has been reported to range from 7.6 to 7.89, suggesting that at pH values likely to be encountered in the mammalian intestinal tract, the majority of the 2,4-DCP is likely to be in the anionic (phenoxide) form. Furthermore, this speciation is not significantly affected by the starting form of the test material (sodium salt of phenol) because these forms readily dissociate in solution to yield the phenoxide anion. Thus, regardless of whether that sodium salt of 2,4-DCP or the phenol form of 2,4-DCP are added to aqueous solutions, the same speciation occurs in solution. Therefore, mammalian toxicity testing of the sodium salt of 2,4-DCP would yield results equivalent to that already achieved in the testing of 2,4-DCP.</li> </ul>
<b>Reliability</b>	<ul style="list-style-type: none"> <li>: (1) valid without restriction</li> </ul>