Tetrachloroethylene (Perchloroethylene)
\[ \text{C}_2\text{Cl}_4 \]
[CAS No. 127-18-4]

Reproductive toxicant: Group 3

There are some epidemiological studies that have raised concerns regarding the reproductive toxicity of tetrachloroethylene (TCE), as they indicated a possible association between occupational exposure and adverse effects on reproductive health among chemical workers (especially dry cleaning/laundry workers)\(^1\)\(^{-6}\). However, the results of these studies are considered insufficient evidence as a whole for the reproductive toxicity of TCE, because the levels of tetrachloroethylene in the workplace as well as those of coexisting chemicals were not clearly identified. On the other hand, animal studies have shown some evidence of reproductive toxicity in rats and mice, including resorption, subcutaneous edema, delayed ossification, and behavioral changes in offspring\(^7\),\(^8\) although one study failed to show such effects clearly in rats and rabbits\(^9\). Based on this evidence, TCE is classified as a Group 3 reproductive toxicant.

References