Group 3

Chromium
Cr
[CAS No. 7440-47-3]
Reproductive toxicant: Group 3

Several epidemiology studies have been reported regarding the reproductive toxicity of chromium; however, they are considered insufficient because information about the exposure was not adequately described\(^{1−3}\). As for animal studies, adverse effects of chromium (VI) by oral administration via drinking water have been reported, i.e., retarded fetal development, reduced number of fetuses and fetal weight, and high incidences of dead fetuses and resorptions in mice and reduced numbers of implantations and fetuses in rats\(^{4,5}\). On the other hand, reproductive toxicity studies of chromium (VI) by administration via diet have failed to observe significant adverse effects in rats and mice\(^{6,7}\). Consequently, the results of these studies are inconsistent, and thus evidence for the reproductive toxicity of chromium is considered to be insufficient as a whole. Based on this evidence, chromium is classified as a Group 3 reproductive toxicant.

References

6) NTP. Final report on the reproductive toxicity of potassium dichromate (hexavalent) (CAS No. 7778-50-9) administered in diet to SD rats. National Institute of Environmental Health Sciences, National Toxicology Program. PB97125355. 1996.
7) NTP. Final report on the reproductive toxicity of potassium dichromate (hexavalent) (CAS No. 7778-50-9) administered in diet to BALB/c mice. National Institute of Environmental Health Sciences, National Toxicology Program. PB97125363. 1996.