

Perfluorooctanoic acid (PFOA)



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Reproductive toxicant: Group 1

Many epidemiological studies have been reported. A negative association has been reported for the perfluorooctanoic acid (PFOA) concentration with the pregnancy period (as well as birth weight, birth height, and Apgar score in children) among females living in PFOA-contaminated houses¹⁾. Significant negative correlations between PFOA concentrations and birth weight were also found in other studies²⁻⁴⁾. Intrauterine exposure to PFOA tended to reduce the sperm concentration and all sperm counts and significantly raised the levels of luteotropin and follitropin⁵⁾. Many animal studies have shown reproductive effects including a fertility decrease⁶⁾, embryotoxicity^{6, 7)}, developmental toxicity⁷⁾, and teratogenicity⁸⁾. Based on this evidence, PFOA is classified as a Group 1 reproductive toxicant. Precautions should be taken to prevent the reproductive toxicity of this substance even if exposure levels are at or below the current OEL-M.

References

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