

Abstract

The purpose of this study was to investigate the toxic effects of iso-butylalcohol on Sprague-Dawley rats which were treated 6 hours a day, 5 days a week for 13 weeks by inhalation.

The results were as follows:

1. Iso-butylalcohol did not induce any abnormal change in the viewpoint of clinical signs, feed consumption, ophthalmic test, urinalysis, hematology and blood biochemistry during and at the terminal of the inhalation toxicity test .
2. We did not find any abnormal findings in the gross and microscopic observations due to the inhalation of iso-butylalcohol. There was no alteration in relative organ weight owing to the inhalation of the iso-butylalcohol.
3. Acute mean lethal concentration (LC_{50}) of iso-butylalcohol was observed to be more than 3,000 ppm. No observed adverse effect level (NOAEL) of iso-butylalcohol was 3,000 ppm in rats under the inhalation of 6 hours a day, 5 days a week for 13 weeks.

In conclusion, LC₅₀ of iso-butylalcohol was more than 3,000 ppm, and its NOAEL was 3,000 ppm in rats under the inhalation of 6 hours a day, 5 days a week for 13 weeks. Iso-butylalcohol did not show any change in the clinical signs, feed consumption, ophthalmic test, urinalysis, hematology and blood biochemistry, together with no alteration in the gross and pathological findings.