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**TOXICOLOGICAL EVALUATION OF SUBSTITUTED
DICYCLOPENTADIENYLIRON (FERROCENE) COMPOUNDS**

(Acetylferrocene; ethylferrocene; 2,2-bis(ethylferrocenyl)propane)

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SUMMARY

The acute toxicity of 3 substituted ferrocenes: acetylferrocene, ethylferrocene, and 2,2-bis(ethylferrocenyl)propane (Catocene) were studied in rats, rabbits and monkeys. Acetylferrocene was found to be the most toxic. The oral lethal dose was less than 5 mg/kg for female rats, between 5 and 50 mg/kg for male rats, and between 10 and 100 mg/kg for monkeys. The toxicity of acetylferrocene appeared to be delayed, with most mortality occurring on the third day after dosing. Acetylferrocene was also highly toxic by skin or eye exposure. Gross pathological examination revealed signs of pneumonopathy in both the rats and monkeys. The mechanism by which monkeys are less susceptible than rats to the toxicity of acetylferrocene is not clear.