Why is Sudan III carcinogenic?

Response:

Sudan I, sudan III, and sudan IV have been classified as category 3 carcinogens by International Agency for Research on Cancer. Sudan III is known to induce CYP1A1 protein and mRNA.

For more detail you may read this paper.

- The induction of cytochrome P450 1A1 by sudan dyes.
- Sudan III dye strongly induces CYP1A1 mRNA expression in HepG2 cells