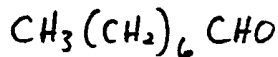


CHEMICAL NAME: Aldehyde C-8 (Octanal)CAS NO.: 124-13-0CHEMICAL STRUCTURE:FEMA SLR CODE No.: M1GRADE AND PURITY:APPROVING AGENCY

FDA: 172.515

FEMA: 2797

CoE: 97

GERMANY: No

HUNTER: No

RJRT USAGECigarette: X (Flavor
mixture ingredient)

Filter:

Pipe:

STP:

Other:

OCCURRENCE

Tobacco Isolate:

Smoke Isolate:

DAILY INTAKE

ug/40 cigarettes:

TOXICITY DATAToxicity:

The acute oral LD₅₀ for aldehyde C-8 in rats was reported to be 5.63 ml/kg, and the dermal LD₅₀ in rabbits was 6.35 ml/kg. The inhalation of concentrated vapour by rats for 8 hours produced no deaths, and skin and eye irritation was very mild..

H. F. Smyth et al., Jour. Am. Ind. Hyg. Assoc. 23 95 (1962).

Irritation:

Undiluted aldehyde C-8 was mildly irritating in the rabbit.

Smyth op. cit.

Sensitization:

A standard repeated insult patch-test using a 0.25% concentration in alcohol did not sensitize any of 40 subjects.

CHEMICAL INFORMATION FILE

CHEMICAL NAME: Aldehyde C-8 (Octanal)

CAS NO.: 124-13-0

TOXICITY DATA

P. Majors, Report to RIFM, May 6, 1972; cited by D. L. J. Opdyke, Food Cosmet. Toxicol. 11 113 (1973).

Metabolism:

The lower unsubstituted aliphatic aldehydes, including aldehyde C-8, are readily oxidized to the corresponding fatty acids, which undergo oxidation to carbon dioxide and water.

R. T. Williams, Detoxification Mechanisms, The Metabolism and Detoxification of Drugs, Toxic Substances, and Other Organic Compounds, 2nd ed., pg. 92 (1959).

Natural Occurrence and Dietary Intake:

Aldehyde C-8 has been identified as a natural constituent of many foods including celery, cocoa powder, coconut meat, chicken meat, grapefruit, oranges, roasted peanuts, etc. According to survey data from the National Academy of Sciences, a possible average daily intake for an adult has been listed as 1.35 mg, although the authors warn that this value may be an overestimate.

SLR of Aliphatic Primary Alcohols, Aldehydes, Acids, and Related Esters in Flavor Usage, FEMA, Vol. 3, PB-254/976, pgs. 211-220 (1975); Vol. 5, PB-254/978, pg. 719 (1975).