

International Agency for Research on Cancer (IARC) - Summaries & Evaluations

CHLORDIMEFORM

VOL.: 30 (1983) (p. 61)

CAS No.: 6164-98-3

Chem. Abstr. Name: Methanimidamide, *N'*-(4-chloro-2-methylphenyl)-*N,N*-dimethyl-

5. Summary of Data Reported and Evaluation

5.1 Experimental data

No published study on the carcinogenicity of chlordimeform was available.

para-Chloro-*ortho*-toluidine, a metabolite of chlordimeform, was tested for carcinogenicity in two strains of mice and two strains of rats by oral administration in the diet. It was carcinogenic in both strains of mice, producing haemangiosarcomas. The studies in rats were not indicative of a carcinogenic effect, but certain limitations in their design were noted.

Chlordimeform is metabolized to a number of compounds, including *para*-chloro-*ortho*-toluidine, which has been identified in the urine of several animal species and of humans.

The available data were inadequate to evaluate the teratogenicity of chlordimeform to experimental animals.

Chlordimeform was negative in tests for DNA damage or mutagenicity in several cellular systems. No data were available, however, with regard to its mutagenicity in mammals, and no overall evaluation of the mutagenicity of chlordimeform could be made.

5.2 Human data

Chlordimeform was introduced in 1966. Its production, formulation and use as an insecticide on cotton are potential sources of occupational exposure.

No data were available to evaluate the teratogenic or chromosomal effects of chlordimeform in humans.

No case report or epidemiological study of the carcinogenicity of chlordimeform alone was available to the Working Group; however, it should be noted that the latent period since introduction of this compound may be too short for a carcinogenic effect to be detected in humans. (See also the section 'Cancer Epidemiology of Pesticide Manufacturers, Formulators and Users', in this volume.)

5.3 Evaluation

No data were available on the carcinogenicity of chlordimeform to experimental animals. However, results of experiments in mice provide *sufficient evidence* that *para-chloro-ortho-toluidine*, a metabolite of chlordimeform, is carcinogenic to experimental animals. No relevant data on humans were available.

The available data are insufficient to evaluate the carcinogenicity of chlordimeform to humans.

For definition of the italicized terms, see [Preamble Evaluation](#).

Subsequent evaluation: Suppl. 7 (1987) (p. 59: **Group 3**)

Synonyms

- Acaron
- Bermat
- C 8514
- Carzol
- Chlorfenamidine
- Chlorodimeform
- Chlorophenamidin
- Chlorophenamidine
- *N'*-(4-Chloro-ortho-tolyl)-*N,N*-dimethylformamidine
- Chlorphenamidine
- Ciba 8514
- Ciba - C8514
- *N,N*-Dimethyl-*N'*-(2-methyl-4-chlorophenyl)formamidine
- ENT 27335
- ENT 27567
- EP-333
- Fundal
- Fundal 500
- Fundex
- Galecron
- *N'*-(2-Methyl-4-chlorophenyl)-*N,N*-dimethylformamidine
- RS 141
- Schering 36268
- SN 36268
- Spanon
- Spanone

See Also:

[Toxicological Abbreviations](#)

[Chlordimeform \(EHC 199, 1998\)](#)

[Chlordimeform \(ICSC\)](#)

[Chlordimeform \(WHO Pesticide Residues Series 1\)](#)

[Chlordimeform \(WHO Pesticide Residues Series 5\)](#)

[Chlordimeform \(Pesticide residues in food: 1978 evaluations\)](#)

[Chlordimeform \(Pesticide residues in food: 1979 evaluations\)](#)

[Chlordimeform \(Pesticide residues in food: 1980 evaluations\)](#)

[Chlordimeform \(Pesticide residues in food: 1985 evaluations Part II Toxicology\)](#)

[Chlordimeform \(Pesticide residues in food: 1987 evaluations Part II Toxicology\)](#)