Ally; CASRN 74223-64-6

Human health assessment information on a chemical substance is included in the IRIS database only after a comprehensive review of toxicity data, as outlined in the IRIS assessment development process. Sections I (Health Hazard Assessments for Noncarcinogenic Effects) and II (Carcinogenicity Assessment for Lifetime Exposure) present the conclusions that were reached during the assessment development process. Supporting information and explanations of the methods used to derive the values given in IRIS are provided in the guidance documents located on the IRIS website.

STATUS OF DATA FOR Ally

File First On-Line 06/30/1988

<table>
<thead>
<tr>
<th>Category (section)</th>
<th>Assessment Available?</th>
<th>Last Revised</th>
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<tr>
<td>Oral RfD (I.A.)</td>
<td>yes</td>
<td>06/30/1988</td>
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<tr>
<td>Inhalation RfC (I.B.)</td>
<td>not evaluated</td>
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<tr>
<td>Carcinogenicity Assessment (II.)</td>
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I. Chronic Health Hazard Assessments for Noncarcinogenic Effects

I.A. Reference Dose for Chronic Oral Exposure (RfD)

Substance Name — Ally
CASRN — 74223-64-6
Last Revised — 06/30/1988

The oral Reference Dose (RfD) is based on the assumption that thresholds exist for certain toxic effects such as cellular necrosis. It is expressed in units of mg/kg-day. In general, the RfD is an estimate (with uncertainty spanning perhaps an order of magnitude) of a daily exposure to the human population (including sensitive subgroups) that is likely to be without an appreciable risk of deleterious effects during a lifetime. Please refer to the Background Document for an elaboration of these concepts. RfDs can also be derived for the noncarcinogenic health effects of substances that are also carcinogens. Therefore, it is essential to refer to other sources of
information concerning the carcinogenicity of this substance. If the U.S. EPA has evaluated this substance for potential human carcinogenicity, a summary of that evaluation will be contained in Section II of this file.

I.A.1. Oral RfD Summary

<table>
<thead>
<tr>
<th>Critical Effect</th>
<th>Experimental Doses*</th>
<th>UF</th>
<th>MF</th>
<th>RfD</th>
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<tr>
<td>Decreased body weight</td>
<td>NOEL: 500 ppm (25 mg/kg/day)</td>
<td>100</td>
<td>1</td>
<td>2.5E-1 mg/kg/day</td>
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<tr>
<td>2-Year Rat Feeding/Oncogenicity Study</td>
<td>LEL: 5000 ppm (250 mg/kg/day)</td>
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<tr>
<td>duPont, 1985a</td>
<td></td>
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*Conversion Factors -- 1 ppm = 0.05 mg/kg/day (assumed rat food consumption)

I.A.2. Principal and Supporting Studies (Oral RfD)


Groups of 90 male and 90 female Sprague-Dawley rats were fed diets containing the test material at levels of 0, 5, 25, 500, or 5000 ppm for 2 years. Twenty animals/sex/group were removed from the chronic study at 11 weeks for the reproductive phase of the study and put back into the chronic phase at week 32. The LEL for systemic chronic toxicity is considered to be 5000 ppm based on body weights. The NOEL has been determined to be 500 ppm.

Groups of 19 or 20 female rabbits were administered 2 mL portions of allyl in 0.5% aqueous methocel by gavage during days 6 to 18 of gestation, at doses of either 25, 100, 300, or 700 mg/kg/day. Developmental toxicity was not demonstrated. Maternal toxicity was shown by a dose-related increase in mortality and decrease in body weight at doses of 100 mg/kg/day or higher. The 25 mg/kg/day dose was a NOEL. These results are consistent with those of the primary study.
I.A.3. Uncertainty and Modifying Factors (Oral RfD)

UF — An uncertainty factor of 100 was used to account for the inter- and intraspecies differences.

MF — None

I.A.4. Additional Studies/Comments (Oral RfD)

Data Considered for Establishing the RfD:

1) 2-Year Feeding (oncogenic) - rat: Principal study - see previous description; core grade minimum

2) 1-Year Feeding - dog: NOEL=5000 ppm (125 mg/kg/day) (no effect at the HDT); core grade minimum (duPont, 1984)

3) 2-Generation Reproduction - rat: Maternal NOEL=500 ppm (25 mg/kg/day); Maternal LEL=5000 ppm (250 mg/kg/day) (decreased weight gain); Reproductive NOEL=5000 ppm (HDT); Fetotoxic NOEL=5000 ppm (HDT); core grade minimum (duPont, 1985b)

4) Teratology - rat: Teratogenic NOEL=1000 mg/kg/day (HDT); Fetotoxic NOEL=1000 mg/kg/day; Maternal toxic NOEL=none; Maternal toxic LEL=40 mg/kg/day (hyperactivity, ungroomed coat); core grade minimum (duPont, 1982)

5) Teratology - rabbit: Maternal toxic NOEL=25 mg/kg/day; Maternal toxic LEL=100 mg/kg/day (decreased weight gain and death); Teratogenic NOEL=700 mg/kg/day; Fetotoxic NOEL=700 mg/kg/day (HDT); core grade minimum (duPont, 1985c)

Data Gap(s): None

I.A.5. Confidence in the Oral RfD

Study — High
Database — High
RfD — High

The critical study is of good quality and is given a high confidence rating. Additional studies are also of good quality; therefore, the database is given a high confidence rating. High confidence in the RfD follows.
I.A.6. EPA Documentation and Review of the Oral RfD

Source Document — This assessment is not presented in any existing U.S. EPA document.

Other EPA Documentation — Pesticide Registration Files

Agency Work Group Review — 04/22/1986, 08/12/1987

Verification Date — 08/12/1987

Screening-Level Literature Review Findings — A screening-level review conducted by an EPA contractor of the more recent toxicology literature pertinent to the RfD for Ally conducted in September 2002 did not identify any critical new studies. IRIS users who know of important new studies may provide that information to the IRIS Hotline at hotline.iris@epa.gov or (202)566-1676.

I.A.7. EPA Contacts (Oral RfD)

Please contact the IRIS Hotline for all questions concerning this assessment or IRIS, in general, at (202)566-1676 (phone), (202)566-1749 (FAX) or hotline.iris@epa.gov (internet address).

I.B. Reference Concentration for Chronic Inhalation Exposure (RfC)

Substance Name — Ally
CASRN — 74223-64-6

Not available at this time.

II. Carcinogenicity Assessment for Lifetime Exposure

Substance Name — Ally
CASRN — 74223-64-6

This substance/agent has not undergone a complete evaluation and determination under US EPA's IRIS program for evidence of human carcinogenic potential.
III. [reserved]
IV. [reserved]
V. [reserved]

VI. Bibliography

Substance Name — Ally
CASRN — 74223-64-6

VI.A. Oral RfD References


VI.B. Inhalation RfD References

None

VI.C. Carcinogenicity Assessment References

None
VII. Revision History

Substance Name — Ally  
CASRN — 74223-64-6

<table>
<thead>
<tr>
<th>Date</th>
<th>Section</th>
<th>Description</th>
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<td>12/03/2002</td>
<td>I.A.6.</td>
<td>Screening-Level Literature Review Findings message has been added.</td>
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VIII. Synonyms

Substance Name — Ally  
CASRN — 74223-64-6  
Last Revised — 06/30/1988

- 74223-64-6  
- Ally  
- Benzoic acid, 2-((((4-methoxy-6-methyl-1,3,5-triazin-2-yl)amino)carbonyl)amino)sulfonyl)-, methyl ester  
- Benzoic acid, 2-((((4-methoxy-6-methyl-1,3,5-triazin-2-yl)amino)carbonyl)amino)sulfonyl)-, methyl ester (9CI)  
- Caswell No. 419H  
- DPD 63760M  
- DPX 6376  
- DPX T6376  
- EPA Pesticide Chemical Code 122010  
- Gropper  
- Methyl-2-((((4-methoxy-6-methyl-1,3,5-triazin-2-yl)amino)carbonyl)amino)sulfonyl)benzoate  
- Metsulfuron-methyl  
- Metsulfuron methyl ester [ANSI]