

## Hydroquinone; CASRN 123-31-9

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 Hydroquinone

**File First On-Line 10/01/1990**

Category (section)	Assessment Available?	Last Revised
Oral RfD (I.A.)	not evaluated	
Inhalation RfC (I.B.)	message	10/01/1990
Carcinogenicity Assessment (II.)	not evaluated	

## I. Chronic Health Hazard Assessments for Noncarcinogenic Effects

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

Substance Name — Hydroquinone  
CASRN — 123-31-9

Not available at this time.

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

Substance Name — Hydroquinone  
CASRN — 123-31-9

The health effects data for hydroquinone were reviewed by the U.S. EPA RfD/RfC Work Group and determined to be inadequate for derivation of an inhalation RfC. For additional information on health effects of this chemical, interested parties are referred to the EPA documentation listed below.

U.S. EPA. 1987. Health and Environmental Effects Document for p-Hydroquinone Prepared by the Office of Health and Environmental Assessment, Environmental Criteria and Assessment Office, Cincinnati, OH for the Office of Solid Waste and Emergency Response, Washington, DC. (Final Draft)

Agency Work Group Review — 08/23/1990

Screening-Level Literature Review Findings — A screening-level review conducted by an EPA contractor of the more recent toxicology literature pertinent to the RfC for Hydroquinone 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](mailto:hotline.iris@epa.gov) or (202)566-1676.

EPA Contacts:

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](mailto:hotline.iris@epa.gov) (internet address).

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## **II. Carcinogenicity Assessment for Lifetime Exposure**

Substance Name — Hydroquinone  
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This substance/agent has not undergone a complete evaluation and determination under US EPA's IRIS program for evidence of human carcinogenic potential.

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## **VI. Bibliography**

Substance Name — Hydroquinone  
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## VI.A. Oral RfD References

None

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## VI.B. Inhalation RfC References

U.S. EPA. 1987. Health and Environmental Effects Document for p-Hydroquinone Prepared by the Office of Health and Environmental Assessment, Environmental Criteria and Assessment Office, Cincinnati, OH for the Office of Solid Waste and Emergency Response, Washington, DC. (Final Draft)

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## VI.C. Carcinogenicity Assessment References

None

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## VII. Revision History

Substance Name — Hydroquinone  
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Date	Section	Description
10/01/1990	I.B.	Inhalation RfC message on-line
12/03/2002	I.B.	Screening-Level Literature Review Findings message has been added.

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## VIII. Synonyms

Substance Name — Hydroquinone  
CASRN — 123-31-9  
Last Revised — 10/01/1990

- ARCTUVIN
- 1,4-BENZENEDIOL
- P-BENZENEDIOL
- BENZOHYDROQUINONE
- BENZOQUINOL
- BLACK AND WHITE BLEACHING CREAM
- [COMPONENT OF] ARTRA
- [COMPONENT OF] SOLAQUIN
- DIAK 5
- DIHYDROQUINONE
- 1,4-DIHYDROXY-BENZEEN [DUTCH]
- 1,4-DIHYDROXYBENZEN [CZECH]
- DIHYDROXYBENZENE
- 1,4-DIHYDROXYBENZENE
- P-DIHYDROXYBENZENE
- 1,4-DIHYDROXY-BENZOL [GERMAN]
- 1,4-DIIDROBENZENE [ITALIAN]
- P-DIOXOBENZENE
- ELDOPAQUE
- ELDOQUIN
- HE 5
- HIDROQUINONA [SPANISH]
- HSDB 577
- HYDROCHINON [CZECH, POLISH]
- HYDROQUINOL
- HYDROQUINOLE
- HYDROQUINONE
- ALPHA-HYDROQUINONE
- P-HYDROQUINONE
- 4-HYDROXYPHENOL
- P-HYDROXYPHENOL
- IDROCHINONE [ITALIAN]
- NCI-C55834
- NSC 9247
- PHIAQUIN
- QUINOL (VAN)
- BETA-QUINOL
- TECQUINOL
- TENOX HQ
- TEQUINOL
- UANTOX HQ
- UN 2662
- USAF EK-356