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

<table>
<thead>
<tr>
<th>Category (section)</th>
<th>Assessment Available?</th>
<th>Last Revised</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral Rfd (I.A.)</td>
<td>not evaluated</td>
<td></td>
</tr>
<tr>
<td>Inhalation Rfc (I.B.)</td>
<td>message</td>
<td>10/01/1990</td>
</tr>
<tr>
<td>Carcinogenicity Assessment (II.)</td>
<td>not evaluated</td>
<td></td>
</tr>
</tbody>
</table>

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.

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.


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 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 (internet address).

II. Carcinogenicity Assessment for Lifetime Exposure

Substance Name — Hydroquinone
CASRN — 123-31-9

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

VI. Bibliography

Substance Name — Hydroquinone
CASRN — 123-31-9
VI.A. Oral RfD References

None

VI.B. Inhalation RfC References


VI.C. Carcinogenicity Assessment References

None

VII. Revision History

Substance Name — Hydroquinone
CASRN — 123-31-9

<table>
<thead>
<tr>
<th>Date</th>
<th>Section</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/01/1990</td>
<td>I.B.</td>
<td>Inhalation RfC message on-line</td>
</tr>
<tr>
<td>12/03/2002</td>
<td>I.B.</td>
<td>Screening-Level Literature Review Findings message has been added.</td>
</tr>
</tbody>
</table>

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-DIDROBENZENE [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