

**CALIFORNIA ENVIRONMENTAL PROTECTION AGENCY
OFFICE OF ENVIRONMENTAL HEALTH HAZARD ASSESSMENT
SAFE DRINKING WATER AND TOXIC ENFORCEMENT ACT OF 1986
(PROPOSITION 65)**

NOTICE OF INTENT TO LIST: FURFURYL ALCOHOL

July 31, 2015

The California Environmental Protection Agency's Office of Environmental Health Hazard Assessment (OEHHA) intends to list *furfuryl alcohol* as known to the state to cause cancer under the Safe Drinking Water and Toxic Enforcement Act of 1986¹. This action is being proposed under the authoritative bodies listing mechanism².

Chemical [CAS No.]	Endpoint	Reference	Occurrence
<i>Furfuryl alcohol</i> [98-00-0]	cancer	US EPA (2014)	Used to produce furan resins, as a chemical intermediate in the synthesis of other chemicals, and as a solvent in textile printing and alkaline paint strippers. Formed in foods during thermal processing and as a result of the dehydration of sugars.

Background on listing via the authoritative bodies mechanism: A chemical must be listed under the Proposition 65 regulations when two conditions are met:

- 1) An authoritative body formally identifies the chemical as causing cancer (Section 25306(d)³).
- 2) The evidence considered by the authoritative body meets the sufficiency criteria contained in the regulations (Section 25306(e)).

However, the chemical is not listed if scientifically valid data which were not considered by the authoritative body clearly establish that the sufficiency of evidence criteria were not met (Section 25306(f)).

¹ Commonly known as Proposition 65, the Safe Drinking Water and Toxic Enforcement Act of 1986 is codified in Health and Safety Code section 25249.5 *et seq.*

² See Health and Safety Code section 25249.8(b) and Title 27, Cal. Code of Regs., section 25306.

³ All referenced sections are from Title 27 of the Cal. Code of Regulations.

The US Environmental Protection Agency (US EPA) is one of several institutions designated as authoritative for the identification of chemicals as causing cancer (Section 25306(m)).

OEHHA is the lead agency for Proposition 65 implementation. After an authoritative body has made a determination about a chemical, OEHHA evaluates whether listing under Proposition 65 is required using the criteria contained in the regulations.

OEHHA's determination: *Furfuryl alcohol* meets the criteria for listing as known to the state to cause cancer under Proposition 65, based on findings of the US EPA (US EPA, 2014).

Formal identification and sufficiency of evidence for furfuryl alcohol: In 2014, US EPA published a report on furfuryl alcohol entitled *Cancer Assessment Document, Evaluation of the Carcinogenic Potential of Furfural and Furfuryl Alcohol* (US EPA, 2014). This report satisfies the formal identification and sufficiency of evidence criteria in the Proposition 65 regulations for furfuryl alcohol.

US EPA concluded that furfuryl alcohol is “Likely to be Carcinogenic to Humans”. OEHHA is relying on US EPA’s discussion of data and conclusions in the report that furfuryl alcohol causes cancer. Evidence described in the report includes studies showing that furfuryl alcohol increases the incidence of rare nasal epithelial squamous cell carcinomas and combined nasal epithelial carcinomas and epithelial squamous cell carcinomas in male rats, and rare renal carcinomas and combined carcinomas and adenomas in male mice.

Thus, US EPA (2014) has found that furfuryl alcohol causes increased incidences of rare malignant nasal tumors in male rats, and rare malignant and combined malignant and benign kidney tumors in male mice.

Request for comments: OEHHA is requesting comments as to whether furfuryl alcohol meets the criteria set forth in the Proposition 65 regulations for authoritative bodies listings. In order to be considered, **OEHHA must receive comments by 5:00 p.m. on Monday, August 31, 2015.** We encourage you to submit comments in electronic form, rather than in paper form. Comments transmitted by e-mail should be addressed to P65Public.Comments@oehha.ca.gov with “NOIL – furfuryl alcohol” in the subject line. Comments submitted in paper form may be mailed, faxed, or delivered in person to the addresses below:

Mailing Address: Ms. Esther Barajas-Ochoa
Office of Environmental Health Hazard Assessment
P.O. Box 4010, MS-12B
Sacramento, California 95812-4010

Fax: (916) 323-2265

Street Address: 1001 I Street
Sacramento, California 95814

Comments received during the public comment period will be posted on the OEHHA web site after the close of the comment period. Electronic files submitted should not have any form of encryption.

If you have any questions, please contact Esther Barajas-Ochoa at esther.barajas-ochoa@oehha.ca.gov or at (916) 445-6900.

References

US Environmental Protection Agency (US EPA, 2014). Cancer Assessment Document, Evaluation of the Carcinogenic Potential of Furfural and Furfuryl Alcohol. Final Report. Health Effects Division, Office of Pesticide Programs. February 6, 2014.