

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

**CANDIDATE FOR LISTING VIA THE LABOR CODE MECHANISM FOUND NOT TO  
MEET THE LISTING CRITERIA: ANTIMONY (TRIVALENT COMPOUNDS)**

**June 16, 2023**

**(Date of publication in the California Regulatory Notice Register)**

The California Environmental Protection Agency's Office of Environmental Health Hazard Assessment (OEHHA) identified antimony (trivalent compounds) as a potential candidate for listing under Proposition 65 (Health and Safety Code [HSC] sections 25249.5 et seq.) as known to cause cancer via the "Labor Code" mechanism (HSC section 25249.8(a); Title 27 Cal. Code of Regs. section 25904). This potential action was based on a conclusion by the International Agency for Research on Cancer [IARC] (IARC 2022; Karagas et al. 2022), and was noticed in the California Regulatory Notice Register (Register 2022, Number 39-Z, September 30, 2022). The publication of the notice initiated a public comment period (September 30, 2022 – October 31, 2022). OEHHA received six sets of comments during the comment period. The comments are posted with the Notice of Intent to List on OEHHA's website, which is available at <https://oehha.ca.gov/proposition-65/cnr/notice-intent-list-chemical-labor-code-mechanism-antimony-trivalent-compounds>.

On May 5, 2023, volume 131 of the IARC Monographs on the Identification of Carcinogenic Hazards to Humans, entitled "Cobalt, Antimony Compounds, and Weapons-Grade Tungsten Alloy" was published (IARC, 2023). After review of the 2023 monograph, OEHHA has determined antimony (trivalent compounds) does not meet the criteria for listing as causing cancer via the Labor Code mechanism. While as indicated in Karagas et al. and IARC (2022), IARC placed "antimony (trivalent compounds)" in IARC Group 2B (possibly carcinogenic to humans), IARC (2023) explained this broader listing was based on strong mechanistic evidence in human primary cells and experimental systems for trivalent antimony and sufficient evidence in experimental animals for one compound (antimony trioxide) and not for antimony (trivalent compounds), as required by Title 27 California Code of Regulations, section 25904(b)(3). For this reason, OEHHA will not proceed at this time with the Proposition 65 listing of antimony (trivalent compounds). This determination does not affect the existing listing of antimony oxide (antimony trioxide), which was listed under Proposition 65 in 1990.

## References

International Agency for Research on Cancer (IARC, 2022). Agents Classified by the IARC Monographs, Volumes 1-132. IARC, World Health Organization, Lyon, France. Most recent list available at URL: <https://monographs.iarc.who.int/list-of-classifications/> [Accessed July 7, 2022].

International Agency for Research on Cancer (IARC, 2023). IARC Monographs on the Identification of Carcinogenic Hazards to Humans, Volume 131. Cobalt, Antimony Compounds, and Weapons-Grade Tungsten Alloy. IARC, World Health Organization, Lyon, France. Available from <https://publications.iarc.fr/618> [Accessed May 16, 2023].

Karagas MR, Wang A, Dorman DC, Hall AL, Pi J, Sergi CM, Symanski E, Ward EM, Arrandale VH, Azuma K, Brambila E, Calaf GM, Fritz, JM, Fukushima S, Gaitens JM, Grimsrud TK, Guo L, Lynge E, Marinho-Reis AP... Carcinogenicity of cobalt, antimony compounds, and weapons-grade tungsten alloy. *The Lancet Oncology* 23(5), 577-578. Published online April 7, 2022, doi: 10.1016/S1470-2045(22)00219-4. Available at URL: [https://www.thelancet.com/journals/lanonc/article/PIIS1470-2045\(22\)00219-4/fulltext](https://www.thelancet.com/journals/lanonc/article/PIIS1470-2045(22)00219-4/fulltext) [Accessed April 18, 2022]