

Chromium (hexavalent compounds)

Listed as Causing

Cancer

Cancer: 02/27/1987

Basis for Listing [LC](#)

Reproductive Toxicity

Developmental Effects: 12/19/2008

Basis for Listing: [SQE](#)

Effects on Female Reproductive System: 12/19/2008

Basis for Listing: [SQE](#)

Effects on Male Reproductive System: 12/19/2008

Basis for Listing: [SQE](#)

Fact Sheets

- [Chromium \(Hexavalent Compounds\) - \(Chromium 6, Chromium VI\)](#)

Chromium (Hexavalent Compounds)

(Chromium 6, Chromium VI)

Why am I being warned about potential exposure to hexavalent chromium compounds?

- Hexavalent chromium (chromium 6) compounds are on the [Proposition 65](#) list because they can cause cancer. Exposure to chromium 6 compounds can increase the risk of lung cancer. Chromium 6 compounds may also cause cancers of the nose and nasal sinuses.
- Hexavalent chromium (chromium 6) compounds are also on the Proposition 65 list because they can cause birth defects or other reproductive harm. Exposure to chromium 6 compounds during pregnancy may affect the development of the child. Exposure to chromium 6 compounds may harm the reproductive systems of men and women.
- Proposition 65 requires businesses to determine if they must provide a warning about exposure to [listed chemicals](#).

What is chromium 6?

- Chromium 6, also known as hexavalent chromium, is the most toxic form of the metal chromium. It is naturally found in rocks, and may enter the groundwater by the weathering of chromium 6-containing rocks, or from industrial contamination. Chromium 6:
 - Is used in pigments for textile dyes, paints, and inks.
 - Is used in chrome plating processes, and in wood preservatives.
 - Is emitted during casting, welding, and cutting stainless steel.
 - May be present at low levels in some leather goods, and in cement, which is commonly used in concrete, mortar, stucco, and grouts.

How does exposure to chromium 6 occur?

- Chromium 6 can be inhaled when it occurs as an air contaminant. It can be released into the air from cement manufacture, chrome plating, stainless steel production, soldering, and certain other industrial processes.
- Chromium 6 can be ingested when it is present in drinking water. This has been a concern in some communities. California is currently working to directly regulate the amount of chromium 6 allowed in public drinking water.
- Chromium 6 can be ingested by contact with soil or dust containing chromium 6. This is because particles of soil or dust containing chromium 6 may be transferred from the hands to the mouth, and swallowed.
- During pregnancy, chromium 6 can pass from mother to baby.

Ways you can be exposed to chromium 6:

Image

How can I reduce my exposure to chromium 6?

- Keep children away from welding fumes and other metal vapor and dusts.
- If you do any welding, soldering, or other metalworking as a hobby, use proper personal protective equipment. When welding, use a welding helmet, welding respirator, and leather welding gloves. During cement work, use full-cover goggles or safety glasses with side shields and waterproof gloves.
- If you use well water, have it tested for chromium 6. If your water comes from a public supplier, it is already tested regularly for chromium 6. You may wish to check with your water supplier regarding chromium 6 in your water. The Consumer Confidence Report on your water supplier's website (or available upon request from your water supplier) will disclose the levels, if any, of "total" chromium that may be in your drinking water. "Total" chromium includes both chromium 6 and a less-toxic form of the metal, chromium 3.

- Take commonsense steps to avoid unnecessary exposure to dust and soil, which can contain chromium 6.
 - Wash your and your child's hands frequently, especially before preparing food, and before eating.
 - Remove your shoes or wipe soil off them before entering your house.
 - Clean your floors regularly, using a wet mop or a vacuum cleaner with a high-efficiency particulate air (HEPA) filter, if possible.
 - Wipe up dust regularly, using a damp cloth.

For more information:

General Fact Sheets and Resources

- US Department of Health and Human Services (HHS)
National Toxicology Program (NTP)
 - [Hexavalent Chromium](#)
- Agency for Toxic Substances and Disease Registry (ATSDR)
 - [Chromium](#)
- US Environmental Protection Agency (US EPA)
 - [Chromium in Drinking Water](#)
- California Environmental Protection Agency (CalEPA)
California State Water Resources Control Board (SWRCB)
 - [GeoTracker GAMA](#)

Scientific Information on Chromium 6

- World Health Organization (WHO)
International Agency for Research on Cancer (IARC)
 - IARC Monographs on the Evaluation of Carcinogenic Risks to Humans, vol. 100 C (2012). "Chromium (VI) Compounds" in [Arsenic, Metals, Fibres, and Dusts](#), pages 147-167.
- California Environmental Protection Agency (CalEPA)
Office of Environmental Health Hazard Assessment (OEHHA)
 - [Public Health Goals for Chemicals in Drinking Water, Hexavalent Chromium \(Cr VI\)](#)
 - [Evidence on the Developmental and Reproductive Toxicity of Chromium \(hexavalent compounds\)](#)

Proposition 65

- California Environmental Protection Agency (CalEPA)
Office of Environmental Health Hazard Assessment (OEHHA)
 - Proposition 65: [Background](#)
 - Proposition 65: [The List of Chemicals](#)
 - Proposition 65: [Fact Sheets](#)

