

## OCCUPATIONAL EXPOSURE LIMITS FOR HEXAVALENT CHROMIUM

STANDARD-SETTING BODY	TYPE OF Cr(VI) COMPOUND	EXPOSURE LIMIT expressed as Cr(VI)	MEASURED AS....
Current Occupational Exposure Limits (2005)			
OSHA PEL	All compounds	52 µg/m <sup>3</sup> 100 µg/m <sup>3</sup> (as CrO <sub>3</sub> )	Ceiling
ACGIH TLV	Water-soluble compounds	50 µg/m <sup>3</sup>	8-hour TWA
	Water-insoluble compounds unless listed below	10 µg/m <sup>3</sup>	8-hour TWA
	Strontium chromate	0.5 µg/m <sup>3</sup>	8-hour TWA
	Calcium chromate	1 µg/m <sup>3</sup>	8-hour TWA
	Lead chromate	12 µg/m <sup>3</sup>	8-hour TWA
NIOSH REL	All compounds	1 µg/m <sup>3</sup>	8-hour TWA
NIOSH IDLH	All compounds	15,000 µg/m <sup>3</sup>	
Proposed Occupational Exposure Limit (2006)			
OSHA PEL	All compounds	1 µg/m <sup>3</sup>	8-hour TWA

**Footnotes and Acronyms:**

**Cr(VI):** Hexavalent chromium

**CrO<sub>3</sub>:** Chromium trioxide

**OSHA PEL:** Occupational Safety and Health Administration Permissible Exposure Limit. OSHA adopts and enforces regulatory limits (called PELs) for exposure to workplace chemicals.

**ACGIH TLV:** American Conference of Governmental Industrial Hygienists Threshold Limit Values. ACGIH recommends limits (called TLVs) for exposure to workplace chemicals.

**NIOSH REL:** National Institute for Occupational Safety and Health Recommended Exposure Limit. NIOSH proposes limits (called RELs) to OSHA.

**NIOSH IDLH:** National Institute for Occupational Safety and Health Immediately Dangerous to Life and Health. NIOSH recommends limits (called IDLH limits) that are likely to cause death, immediate or delayed permanent adverse health effects, or prevent escape.

**µg/m<sup>3</sup>:** micrograms of Cr(VI) in a cubic meter of air. It is a measure of concentration (weight/volume)

**Ceiling:** Ceiling limit not to be exceeded at any time

**8-hour TWA:** Eight-hour time-weighted-average limit

**Water insoluble Cr(VI)** includes zinc chromate, calcium chromate, lead chromate, barium chromate, strontium chromate, and sintered chromium trioxide

**Water soluble Cr(VI)** includes chromic acid, chromic trioxide, chromium trioxide, chromic acid anhydride, and chromates and dichromates of sodium, potassium, ammonium, lithium, cesium, and rubidium