

[Regulations \(Standards - 29 CFR\) - Table of Contents](#)

---

● <b>Part Number:</b>	1910
● <b>Part Title:</b>	Occupational Safety and Health Standards
● <b>Subpart:</b>	Z
● <b>Subpart Title:</b>	Toxic and Hazardous Substances
● <b>Standard Number:</b>	<u>1910.1048</u>
● <b>Title:</b>	Formaldehyde.
● <b>Appendix:</b>	A , B , C , D , E

---

**1910.1048(a)**

Scope and application. This standard applies to all occupational exposures to formaldehyde, i.e. from formaldehyde gas, its solutions, and materials that release formaldehyde.

**1910.1048(b)**

Definitions. For purposes of this standard, the following definitions shall apply:

"Action level" means a concentration of 0.5 part formaldehyde per million parts of air (0.5 ppm) calculated as an eight (8)-hour time-weighted average (TWA) concentration.

"Assistant Secretary" means the Assistant Secretary of Labor for the Occupational Safety and Health Administration, U.S. Department of Labor, or designee.

"Authorized Person" means any person required by work duties to be present in regulated areas, or authorized to do so by the employer, by this section, or by the OSH Act of 1970.

"Director" means the Director of the National Institute for Occupational Safety and Health, U.S. Department of Health and Human Services, or designee.

"Emergency" is any occurrence, such as but not limited to equipment failure, rupture of containers, or failure of control equipment that results in an uncontrolled release of a significant amount of formaldehyde.

"Employee exposure" means the exposure to airborne formaldehyde which would occur without corrections for protection provided by any respirator that is in use.

"Formaldehyde" means the chemical substance, HCHO, Chemical Abstracts Service Registry No. 50-00-0.

**1910.1048(c)**

Permissible Exposure Limit (PEL) -

**1910.1048(c)(1)**

TWA: The employer shall assure that no employee is exposed to an airborne concentration of formaldehyde which exceeds 0.75 parts formaldehyde per million parts of air (0.75 ppm) as an 8-hour TWA.

**1910.1048(c)(2)**

Short Term Exposure Limit (STEL): The employer shall assure that no employee is exposed to an airborne concentration of formaldehyde which exceeds two parts formaldehyde per million parts of air (2 ppm) as a 15-minute STEL.

**1910.1048(d)**

Exposure monitoring -

**1910.1048(d)(1)**

General.

**1910.1048(d)(1)(i)**

Each employer who has a workplace covered by this standard shall monitor employees to determine their exposure to formaldehyde.

**1910.1048(d)(1)(ii)**

Exception. Where the employer documents, using objective data, that the presence of formaldehyde or formaldehyde-releasing products in the workplace cannot result in airborne concentrations of formaldehyde that would cause any employee to be exposed at or above the action level or the STEL under foreseeable conditions of use, the employer will not be required to measure employee exposure to formaldehyde.

**1910.1048(d)(1)(iii)**

When an employee's exposure is determined from representative sampling, the measurements used shall be representative of the employee's full shift or short-term exposure to formaldehyde, as appropriate.

**1910.1048(d)(1)(iv)**

Representative samples for each job classification in each work area shall be taken for each shift unless the employer can document with objective data that exposure levels for a given job classification are equivalent for different work shifts.

**1910.1048(d)(2)**

Initial monitoring. The employer shall identify all employees who may be exposed at or above the action level or at or above the STEL and accurately determine the exposure of each employee so identified.

**1910.1048(d)(2)(i)**

Unless the employer chooses to measure the exposure of each employee potentially exposed to formaldehyde, the employer shall develop a representative sampling strategy and measure sufficient exposures within each job classification for each