

---

## 29 C.F.R. § 1910.1003

---

### 13 Carcinogens (4-Nitrobiphenyl, etc.).

---

(a) *Scope and application.* (1) This section applies to any area in which the 13 carcinogens addressed by this section are manufactured, processed, repackaged, released, handled, or stored, but shall not apply to transshipment in sealed containers, except for the labeling requirements under paragraphs (e)(2), (3) and (4) of this section. The 13 carcinogens are the following:

4-Nitrobiphenyl, Chemical Abstracts Service Register Number (CAS No.) 92933;

alpha-Naphthylamine, CAS No. 134327;

methyl chloromethyl ether, CAS No. 107302;

3,4-Dichlorobenzidine (and its salts) CAS No. 91941;

bis-Chloromethyl ether, CAS No. 542881;

beta-Naphthylamine, CAS No. 91598;

Benzidine, CAS No. 92875;

4-Aminodiphenyl, CAS No. 92671;

Ethyleneimine, CAS No. 151564;

beta-Propiolactone, CAS No. 57578;

2-Acetylaminofluorene, CAS No. 53963;

4-Dimethylaminoazo-benzene, CAS No. 60117; and

N-Nitrosodimethylamine, CAS No. 62759.

(2) This section shall not apply to the following:

(i) Solid or liquid mixtures containing less than 0.1 percent by weight or volume of 4-Nitrobiphenyl; methyl chloromethyl ether; bis-chloromethyl ether; beta-Naphthylamine; benzidine or 4-Aminodiphenyl; and

(ii) Solid or liquid mixtures containing less than 1.0 percent by weight or volume of alpha-Naphthylamine; 3,4-Dichlorobenzidine (and its salts); Ethyleneimine; beta-Propiolactone; 2-Acetylaminofluorene; 4-Dimethylaminoazobenzene, or N-Nitrosodimethylamine.

(b) *Definitions.* For the purposes of this section:

*Absolute filter* is one capable of retaining 99.97 percent of a mono disperse aerosol of 0.3 µm particles.

---

*Authorized employee* means an employee whose duties require him to be in the regulated area and who has been specifically assigned by the employer.

*Clean change room* means a room where employees put on clean clothing and/or protective equipment in an environment free of the 13 carcinogens addressed by this section. The clean change room shall be contiguous to and have an entry from a shower room, when the shower room facilities are otherwise required in this section.

*Closed system* means an operation involving a carcinogen addressed by this section where containment prevents the release of the material into regulated areas, non-regulated areas, or the external environment.

*Decontamination* means the inactivation of a carcinogen addressed by this section or its safe disposal.

*Director* means the Director, National Institute for Occupational Safety and Health, or any person directed by him or the Secretary of Health and Human Services to act for the Director.

*Disposal* means the safe removal of the carcinogens addressed by this section from the work environment.

*Emergency* means an unforeseen circumstance or set of circumstances resulting in the release of a carcinogen addressed by this section that may result in exposure to or contact with the material.

*External environment* means any environment external to regulated and nonregulated areas.

*Isolated system* means a fully enclosed structure other than the vessel of containment of a carcinogen addressed by this section that is impervious to the passage of the material and would prevent the entry of the carcinogen addressed by this section into regulated areas, nonregulated areas, or the external environment, should leakage or spillage from the vessel of containment occur.

*Laboratory-type hood* is a device enclosed on the three sides and the top and bottom, designed and maintained so as to draw air inward at an average linear face velocity of 150 feet per minute with a minimum of 125 feet per minute; designed, constructed, and maintained in such a way that an operation involving a carcinogen addressed by this section within the hood does not require the insertion of any portion of any employee's body other than his hands and arms.

*Nonregulated area* means any area under the control of the employer where entry and exit is neither restricted nor controlled.

*Open-vessel system* means an operation involving a carcinogen addressed by this section in an open vessel that is not in an isolated system, a laboratory-type hood, nor in any other system affording equivalent protection against the entry of the material into regulated areas, non-regulated areas, or the external environment.

This document is only available to subscribers. Please [log in](#) or [purchase access](#).

[Purchase Login](#)