

# Ohio Administrative Code

Rule 1301:7-7-64 Pyrophoric materials.

Effective: December 15, 2017

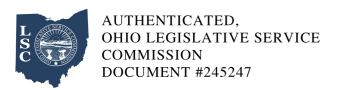
#### (A) Section 6401 General

- (1) 6401.1 Scope. The storage and use of pyrophoric materials shall be in accordance with this rule. Compressed gases shall also comply with rule 1301:7-7-53 of the Administrative Code.
- (2) 6401.2 Permits. Permits shall be required as set forth in rule 1301:7-7-01 of the Administrative Code.
- (B) Section 6402 Definition
- (1) 6402.1 Definition. The following term is defined in rule 1301:7-7-02 of the Administrative Code.

"Pyrophoric."

### (C) Section 6403 General requirements

- (1) 6403.1 Quantities not exceeding the maximum allowable quantity per control area. The storage and use of pyrophoric materials in amounts not exceeding the maximum allowable quantity per control area indicated in paragraph (C)(1)(5003.1) of rule 1301:7-7-50 of the Administrative Code shall be in accordance with paragraphs (A)(5001) and (C)(5003) of rule 1301:7-7-50 of the Administrative Code and paragraphs (A)(6401) and (C)(6403) of this rule.
- (a) 6403.1.1 Emergency shutoff. Compressed gas systems conveying pyrophoric gases shall be provided with approved manual or automatic emergency shutoff valves that can be activated at each point of use and at each source.
- (i) 6403.1.1.1 Shutoff at source. An automatic emergency shutoff valve shall be installed on supply piping at the cylinder or bulk source. The shutoff valve shall be operated by a remotely located



manually activated shutdown control located not less than 15 feet (4572 mm) from the source of supply. Manual or automatic cylinder valves are allowed to be used as the required emergency shutoff valve where the source of supply is limited to unmanifolded cylinder sources.

(ii) 6403.1.1.2 Shutoff at point of use. A manual or automatic emergency shutoff valve shall be installed on the supply piping at the point of use or at a point where the equipment using the gas is connected to the supply system.

(2) 6403.2 Quantities exceeding the maximum allowable quantity per control area. The storage and use of pyrophoric materials in amounts exceeding the maximum allowable quantity per control area indicated in paragraph (C)(1)(5003.1) of rule 1301:7-7-50 of the Administrative Code shall be in accordance with rule 1301:7-7-50 of the Administrative Code and this rule.

## (D) Section 6404 Storage

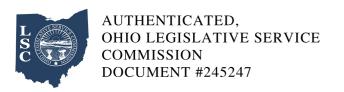
(1) 6404.1 Indoor storage. Indoor storage of pyrophoric materials in amounts exceeding the maximum allowable quantity per control area indicated in Table 5003.1.1(1) of rule 1301:7-7-50 of the Administrative Code, shall be in accordance with paragraphs (A)(5001), (C)(5003) and (D)(5004) of rule 1301:7-7-50 of the Administrative Code and this rule.

The storage of silane gas and gas mixtures with a silane concentration of 1.37 per cent or more by volume, shall be in accordance with CGA G-13 as listed in rule 1301:7-7-80 of the Administrative Code.

(a) 6404.1.1 Liquid-tight floor. In addition to the requirements of paragraph (D)(12)(5004.12) of rule 1301:7-7-50 of the Administrative Code, floors of storage areas containing pyrophoric liquids shall be of liquid-tight construction.

(b) 6404.1.2 Pyrophoric solids and liquids. Storage of pyrophoric solids and liquids shall be limited to a maximum area of 100 square feet  $(9.3 \text{ m}^2)$  per pile. Storage shall not exceed 5 feet (1524 mm) in height. Individual containers shall not be stacked.

Aisles between storage piles shall be not less than 10 feet (3048 mm) in width.



Individual tanks or containers shall not exceed 500 gallons (1893 L) in capacity.

(c) 6404.1.3 Pyrophoric gases. Storage of pyrophoric gases shall be in detached buildings where required by paragraph (C)(8)(b)(5003.8.2) of rule 1301:7-7-50 of the Administrative Code.

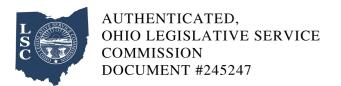
(d) 6404.1.4 Separation from incompatible materials. In addition to the requirements of paragraph (C)(9)(h)(5003.9.8) of rule 1301:7-7-50 of the Administrative Code, indoor storage of pyrophoric materials shall be isolated from incompatible hazardous materials by 1-hour fire barriers with openings protected in accordance with the building code as listed in rule 1301:7-7-80 of the Administrative Code.

Exception: Storage in approved hazardous materials storage cabinets constructed in accordance with paragraph (C)(8)(g)(5003.8.7) of rule 1301:7-7-50 of the Administrative Code.

(2) 6404.2 Outdoor storage. Outdoor storage of pyrophoric materials in amounts exceeding the maximum allowable quantity per control area indicated in Table 5003.1.1(3) of rule 1301:7-7-50 of the Administrative Code shall be in accordance with paragraphs (A)(5001), (C)(5003) and (D)(5004) of rule 1301:7-7-50 of the Administrative Code and this rule.

The storage of silane gas, and gas mixtures with a silane concentration of 1.37 per cent or more by volume, shall be in accordance with CGA G-13 as listed in rule 1301:7-7-80 of the Administrative Code.

- (a) 6404.2.1 Distance from storage to exposures. The separation of pyrophoric solids, liquids and gases from buildings, lot lines, public streets, public alleys, public ways or means of egress shall be in accordance with the following:
- (i) Solids and liquids. Two times the separation required by rule 1301:7-7-57 of the Administrative Code for Class IB flammable liquids.
- (ii) Gases. The location and maximum amount of pyrophoric gas per storage area shall be in accordance with Table 6404.2.1 of this rule.



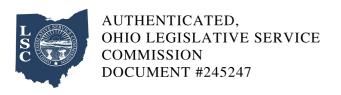
Maximum amount per storage area (cubic feet)	Minimum distance between storage areas (feet)	Minimum distance to lot lines of property that can be built upon (feet)	Minimum distance to public streets, public alleys or public ways (feet)	Minimum distance to buildings on the same property	Nonrated construction or openings within 25 feet	Two-hour construction and openings within 25 feet
Four-hour construction and no openings within 25 feet	250	5	25	5	5	0
0	2,500	10	50	10	10	5
0	7,500	20	100	20	20	10

For SI: 1 foot = 304.8 mm, 1 cubic foot =  $0.02832 \text{ m}^3$ .

- a. The minimum required distances shall be reduced to 5 feet when protective structures having a minimum fire resistance of 2 hours interrupt the line of sight between the container and the exposure. The protective structure shall be at least 5 feet from the exposure. The configuration of the protective structure shall allow natural ventilation to prevent the accumulation of hazardous gas concentrations.
- (b) 6404.2.2 Weather protection. Where overhead construction is provided for sheltering outdoor storage areas of pyrophoric materials, the storage areas shall be provided with approved automatic fire-extinguishing system protection.

#### (E) Section 6405 Use

- (1) 6405.1 General. The use of pyrophoric materials in amounts exceeding the maximum allowable quantity per control area indicated in Table 5003.1.1(1) or 5003.1.1(3) of rule 1301:7-7-50 of the Administrative Code shall be in accordance with paragraphs (A)(5001), (C)(5003) and (E)(5005) of rule 1301:7-7-50 of the Administrative Code and this rule.
- (2) 6405.2 Weather protection. Where overhead construction is provided for sheltering of outdoor use areas of pyrophoric materials, the use areas shall be provided with approved automatic fire-extinguishing system protection.
- (3) 6405.3 Silane gas. The use of silane gas, and gas mixtures with a silane concentration of 1.37 per cent or more by volume, shall be in accordance with CGA G-13 as listed in rule 1301:7-7-80 of the



Administrative Code.