Pyrophoric materials.

(A) Section 41016401 General

(1) 4101.16401.1 Scope. The storage and use of pyrophoric materials shall be in accordance with this rule. Compressed gases shall also comply with rule 1301.7-7-301301.7-7-53 of the Administrative Code.

(2) 4101.26401.2 Permits. Permits shall be required as set forth in rule 1301.7-7-01 of the Administrative Code.

(B) Section 41026402 Definition

(1) 4102.16402.1 Definition. The following word and term shall, for the purposes of this rule and as used elsewhere in this code, have the meaning shown herein defined in rule 1301:7-7-02 of the Administrative Code.

“Pyrophoric” A chemical with an autoignition temperature in air, at or below a temperature of 130°F (54°C).

(C) Section 41036403 General requirements

(1) 4103.16403.1 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) of rule 1301.7-7-271301.7-7-50 of the Administrative Code shall be in accordance with paragraphs (A)(203.15003.1) and (C)(2703.5003) of rule 1301.7-7-271301.7-7-50 of the Administrative Code and paragraphs (A)(4104.6401) and (C)(4103.6403) of this rule.

(a) 4103.1.1.6403.1.1 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) 4103.1.1.1.1.1 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 when the source of supply is limited to unmanifolded cylinder sources.

(ii) 4103.1.1.1.1.2 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) 4103.26403.2 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) of rule 1301.7-7-271301.7-7-50 of the Administrative Code shall be in accordance with rule 1301.7-7-271301.7-7-50 of the Administrative Code and this rule.

(D) Section 41046404 Storage

(1) 4104.16404.1 Indoor storage. Indoor storage of pyrophoric materials in amounts exceeding the maximum allowable quantity per control area indicated in Table 2703.1.15003.1(1) of rule 1301.7-7-271301.7-7-50 of the Administrative Code, shall be in accordance with paragraphs (A)(2704.15003.1), (C)(2703.5003) and (D)(2704.5004) of rule 1301.7-7-271301.7-7-50 of the Administrative Code and this rule.

The storage of silane gas and gas mixtures with a silane concentration of 1.37 percent or more by volume, shall be in accordance with CGA G-13 as listed in rule 1301.7-7-421301.7-7-80 of the Administrative Code.

(a) 4104.1.16404.1.1 Liquid-tight floor. In addition to the requirements of paragraph (D)(12) of rule 1301.7-7-271301.7-7-50 of the Administrative Code, floors of storage areas containing pyrophoric liquids shall be of liquid-tight construction.

(b) 4104.1.26404.1.2 Pyrophoric solids and liquids. Storage of pyrophoric solids and liquids shall be limited to a maximum area of 100 square feet (9.3 m²) per pile. Storage shall not exceed 5 feet (1524 mm) in height. Individual containers shall not be stacked.

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

For copyright claim information, please see the notice attached to the last page of this rule.
Individual tanks or containers shall not exceed 500 gallons (1893 L) in capacity.

(c) **4104.1.4604.1.3 Pyrophoric gases.** Storage of pyrophoric gases shall be in detached buildings where required by paragraph (C)(8)(b) of rule 1301:7-7-271301:7-7-50 of the Administrative Code.

(d) **4104.1.4604.1.4 Separation from incompatible materials.** In addition to the requirements of paragraph (C)(9)(h) of rule 1301:7-7-271301:7-7-50 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 1301:7-7-271301:7-7-80 of the Administrative Code.

**Exception:** Storage in approved hazardous materials storage cabinets constructed in accordance with paragraphs (C)(8)(g) and (C)(9)(h) of rule 1301:7-7-271301:7-7-50 of the Administrative Code.

(2) **4104.2.6404.2 Outdoor storage.** Outdoor storage of pyrophoric materials in amounts exceeding the maximum allowable quantity per control area indicated in Table 2703.1.15003.1.1(3) of rule 1301:7-7-271301:7-7-50 of the Administrative Code shall be in accordance with paragraphs (A)(27015001), (C)(27035003) and (D)(27045004) of rule 1301:7-7-271301:7-7-50 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 1301:7-7-471301:7-7-80 of the Administrative Code.

(a) **4104.2.6404.2.1 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 1301:7-7-341301:7-7-57 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 4104.2.6404.2.1 of this rule.

<table>
<thead>
<tr>
<th>Maximum amount per storage area (cubic feet)</th>
<th>Minimum distance to storage areas (feet)</th>
<th>Minimum distance to lot lines of property that can be built upon (feet)</th>
<th>Minimum distance to public streets, public alleys or public ways (feet)</th>
<th>Minimum distance to buildings on the same property</th>
</tr>
</thead>
<tbody>
<tr>
<td>250</td>
<td>5</td>
<td>25</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>2,500</td>
<td>10</td>
<td>50</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>7,500</td>
<td>20</td>
<td>100</td>
<td>20</td>
<td>20</td>
</tr>
</tbody>
</table>

For SI: 1 foot = 304.8 mm, 1 cubic foot = 0.02832 m³.

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) **4104.2.6404.2.2 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 41056405 Use**

For copyright claim information, please see the notice attached to the last page of this rule.
1301:7-7-4164

(1) **4105.16405.1** General. The use of pyrophoric materials in amounts exceeding the maximum allowable quantity per control area indicated in Table 2703.1.1.5003.1.1(1) or 2703.1.1.5003.1.1(3) of rule 1301:7-7-271301:7-7-50 of the Administrative Code shall be in accordance with paragraphs (A)(27045001), (C)(27035003) and (E)(27055005) of rule 1301:7-7-271301:7-7-50 of the Administrative Code and this rule.

(2) **4105.26405.2** Weather protection. When 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) **4105.36405.3** 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 1301:7-7-271301:7-7-80 of the Administrative Code.

For copyright claim information, please see the notice attached to the last page of this rule.