1301:7-7-62 Organic peroxides.

(A) Section 6201 General

(1) **6201.1 Scope.** The storage and use of organic peroxides shall be in accordance with this *rule* and *rule* 1301:7-7-50 of the Administrative Code.

<u>Unclassified detonable organic peroxides that are capable of detonation in their normal shipping containers under</u> <u>conditions of fire exposure shall be stored in accordance with *rule 1301:7-7-56 of the Administrative Code*.</u>

(2) **6201.2 Permits.** Permits shall be required for organic peroxides as set forth in *rule 1301:7-7-01 of the Administrative Code*.

(B) Section 6202 Definition

(1) 6202.1 Definition. The following term is defined in *rule 1301:7-7-02 of the Administrative Code*.

"Organic peroxide."

- "Class I."
- "Class II."
- "Class III."
- "Class IV."
- "Class V."
- "Unclassified detonable."

(1) **6203.1** Quantities not exceeding the maximum allowable quantity per control area. The storage and use of organic peroxides 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)(6201) and (C)(6203) *of the Administrative Code* and *paragraphs* (A)(6201) and (C)(6203) *of this rule*.

(a) **6203.1.1 Special limitations for indoor storage and use by occupancy.** The indoor storage and use of organic peroxides shall be in accordance with *paragraphs* (C)(1)(a)(i)(6203.1.1.1) to (C)(1)(a)(iv)(6203.1.1.4) of this rule.

(i) **6203.1.1.1 Group A, E, I or U occupancies.** In Group A, E, I or U occupancies, any amount of unclassified detonable and Class I organic peroxides shall be stored in accordance with the following:

- (a) Unclassified detonable and Class I organic peroxides shall be stored in hazardous materials storage cabinets complying with paragraph (C)(8)(g)(5003.8.7) of rule 1301:7-7-50 of the Administrative Code.
- (b) The hazardous materials storage cabinets shall not contain other storage.

(ii) 6203.1.1.2 Group R occupancies. Unclassified detonable and Class I organic peroxides shall not be stored or used within Group R occupancies.

Note: for copyright claim information, please see the notice on the last page of this rule.

⁽C) Section 6203 General requirements

(iii) 6203.1.1.3 Group B, F, M or S occupancies. Unclassified detonable and Class I organic peroxides shall not be stored or used in offices, or retail sales areas of Group B, F, M or S occupancies.

(iv) **6203.1.1.4 Classrooms.** In classrooms in Group B, F or M occupancies, any amount of unclassified detonable and Class I organic peroxides shall be stored in accordance with the following:

- (a) Unclassified detonable and Class I organic peroxides shall be stored in hazardous materials storage cabinets complying with paragraph (C)(8)(g)(5003.8.7) of rule 1301:7-7-50 of the Administrative Code.
- (b) The hazardous materials storage cabinets shall not contain other storage.

(2) **6203.2 Quantities exceeding the maximum allowable quantity per control area.** The storage and use of organic peroxides 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* shall be in accordance with *rule 1301:7-7-50 of the Administrative Code* shall be in accordance with *rule 1301:7-7-50 of the Administrative Code* shall be in accordance with *rule 1301:7-7-50 of the Administrative Code* shall be in accordance with *rule 1301:7-7-50 of the Administrative Code* shall be in accordance with *rule 1301:7-7-50 of the Administrative Code* shall be in accordance with *rule 1301:7-7-50 of the Administrative Code* shall be in accordance with *rule 1301:7-7-50 of the Administrative Code* shall be in accordance with *rule 1301:7-7-50 of the Administrative Code* shall be in accordance with *rule 1301:7-7-50 of the Administrative Code* shall be in accordance with *rule 1301:7-7-50 of the Administrative Code* shall be in accordance with *rule 1301:7-7-50 of the Administrative Code* shall be in accordance with *rule 1301:7-7-50 of the Administrative Code* shall be in accordance with *rule 1301:7-7-50 of the Administrative Code* shall be in accordance with *rule 1301:7-7-50 of the Administrative Code* shall be in accordance with *rule 1301:7-7-50 of the Administrative Code* shall be in accordance with *rule 1301:7-7-50 of the Administrative Code* shall be in accordance with *rule 1301:7-7-50 of the Administrative Code* shall be in accordance with *rule 1301:7-7-50 of the Administrative Code* shall be in accordance with *rule 1301:7-7-50 of the Administrative Code* shall be in accordance with *rule 1301:7-7-50 of the Administrative Code* shall be in accordance with *rule 1301:7-7-50 of the Administrative Code* shall be in accordance with *rule 1301:7-7-50 of the Administrative Code* shall be in accordance with *rule 1301:7-7-50 of the Administra*

(D) Section 6204 Storage

(1) **6204.1 Indoor storage.** Indoor storage of organic peroxides in amounts exceeding the maximum allowable guantity 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*.

Indoor storage of unclassified detonable organic peroxides that are capable of detonation in their normal shipping containers under conditions of fire exposure shall be stored in accordance with *rule 1301:7-7-56 of the* Administrative Code.

(a) **6204.1.1 Detached storage.** Storage of organic peroxides 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.

(b) **6204.1.2** Distance from detached buildings to exposures. In addition to the requirements of the *building code as listed in rule 1301:7-7-80 of the Administrative Code*, detached storage buildings for Class I, II, III, IV and V organic peroxides shall be located in accordance with Table 6204.1.2 *of this rule*. Detached buildings containing quantities of unclassified detonable organic peroxides in excess of those set forth in Table 5003.8.2 of *rule 1301:7-7-50 of the Administrative Code* shall be located in accordance with Table 5604.5.2(1) of *rule 1301:7-7-56 of the Administrative Code*.

Table 6204.1.2

Organic peroxides – distance to exposures from detached storage buildings or outdoor storage areas

	Maximum storage quantity (pounds) at minimum separation distance							
<u>Organic</u>	Distance to buildings, lot lines, public streets, public alleys, public ways or means of egress			Distance between individual detached storage				
peroxide class				buildings or individual outdoor storage areas				
	<u>50 feet</u>	<u>100 feet</u>	<u>150 feet</u>	<u>20 feet</u>	<u>75 feet</u>	<u>100 feet</u>		
<u>l</u>	<u>2,000</u>	<u>20,000</u>	<u>175,000</u>	<u>2,000</u>	20,000	<u>175,000</u>		
<u>II</u>	<u>100,000</u>	<u>200,000</u>	<u>No limit</u>	<u>100,000^a</u>	<u>No limit</u>	<u>No limit</u>		
<u>III</u>	<u>200,000</u>	<u>No limit</u>	<u>No limit</u>	<u>200,000^a</u>	<u>No limit</u>	<u>No limit</u>		
IV	<u>No limit</u>	<u>No limit</u>	<u>No limit</u>	<u>No limit</u>	<u>No limit</u>	<u>No limit</u>		
V	<u>No limit</u>	<u>No limit</u>	<u>No limit</u>	<u>No limit</u>	<u>No limit</u>	<u>No limit</u>		

For SI: 1 foot = 304.8 mm, 1 pound = 0.454 kg.

a. Where the amount of organic peroxide stored exceeds this amount, the minimum separation shall be 50 feet.

(c) **6204.1.3 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 shall be of liquid-tight construction.

(d) **6204.1.4 Electrical wiring and equipment.** In addition to the requirements of *paragraph* (C)(9)(d)(5003.9.4) *of rule 1301:7-7-50 of the Administrative Code*, electrical wiring and equipment in storage areas for Class I or II organic peroxides shall comply with the requirements for electrical Class I, Division 2 locations.

(e) **6204.1.5 Smoke detection.** An approved supervised smoke detection system in accordance with *paragraph* (G)(907) *of rule 1301:7-7-09 of the Administrative Code* shall be provided in rooms or areas where Class I, II or III organic peroxides are stored. Activation of the smoke detection system shall sound a local alarm.

Exception: A smoke detection system shall not be required in detached storage buildings equipped throughout with an approved automatic fire-extinguishing system complying with *rule 1301:7-7-09 of the Administrative Code*.

(f) **6204.1.6 Maximum quantities.** Maximum allowable quantities per building in a mixed occupancy building shall not exceed the amounts set forth in Table 5003.8.2 *of rule 1301:7-7-50 of the Administrative Code.* Maximum allowable quantities per building in a detached storage building shall not exceed the amounts specified in Table 6204.1.2 *of this rule.*

(g) **6204.1.7 Storage arrangement.** Storage arrangements for organic peroxides shall be in accordance with Table 6204.1.7 of this rule and shall comply with all of the following:

- (i) Containers and packages in storage areas shall be closed.
- (ii) Bulk storage shall not be in piles or bins.
- (iii) A minimum 2-foot (610 mm) clear space shall be maintained between storage and uninsulated metal walls.
- (iv) Fifty-five-gallon (208 L) drums shall not be stored more than one drum high.

Table 6204.1.7 Storage of organic peroxides

Organic		Maximum			
<u>Organic</u> peroxide <u>class</u>	<u>Maximum width</u> <u>(feet)</u>	<u>Maximum height</u> <u>(feet)</u>	<u>Minimum</u> <u>distance to next</u> <u>pile (feet)</u>	<u>Minimum</u> distance to walls <u>(feet)</u>	<u>quantity per</u> building
<u>l</u>	<u>6</u>	<u>8</u>	<u>4</u> ^a	<u>4^b</u>	<u>Note c</u>
<u> </u>	<u>10</u>	<u>8</u>	<u>4</u> ^a	<u>4^b</u>	<u>Note c</u>
<u>III</u>	<u>10</u>	<u>8</u>	<u>4</u> ^a	<u>4^b</u>	<u>Note c</u>
IV	<u>16</u>	<u>10</u>	3 ^{a,d}	<u>4^b</u>	No requirement
V	<u>No requirement</u>	<u>No requirement</u>	<u>No requirement</u>	<u>No requirement</u>	<u>No requirement</u>

For SI: 1 foot = 304.8 mm.

a. Not less than one main aisle with a minimum width of 8 feet shall divide the storage area.

b. Distance to noncombustible walls is allowed to be reduced to 2 feet.

c. See Table 6204.1.2 of this rule for maximum quantities.

d. The distance shall be not less than one-half the pile height.

(h) 6204.1.8 Location in building. The storage of Class I or II organic peroxides shall be on the ground floor. Class III organic peroxides shall not be stored in basements.

(i) **6204.1.9 Contamination.** Organic peroxides shall be stored in their original DOTn shipping containers. Organic peroxides shall be stored in a manner to prevent contamination.

(j) **6204.1.10 Explosion control.** Indoor storage rooms, areas and buildings containing unclassified detonable and Class I organic peroxides shall be provided with explosion control in accordance with *paragraph* (K)(911) of *rule 1301:7-7-09 of the Administrative Code*.

(k) **6204.1.11 Standby power.** Standby power shall be provided in accordance with paragraph (D)(604) of rule 1301:7-7-06 of the Administrative Code for the following systems used to protect Class I and unclassified detonable organic peroxide.

- 1. Exhaust ventilation system.
- 2. Treatment system.
- 3. Gas detection system.
- 4. Smoke detection system.
- 5. Temperature control system.
- 6. Fire alarm system.
- 7. Emergency alarm system.

(i) 6204.1.11.1 Fail-safe engineered systems. Standby power shall not be required for mechanical exhaust ventilation, treatment systems and temperature control systems where approved fail-safe engineered systems are installed.

(2) **6204.2 Outdoor storage.** Outdoor storage of organic peroxides in amounts exceeding the maximum allowable guantities 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.

(a) **6204.2.1 Distance from storage to exposures.** Outdoor storage areas for organic peroxides shall be located in accordance with Table 6204.1.2 *of this rule*.

(b) **6204.2.2 Electrical wiring and equipment.** In addition to the requirements of *paragraph* (C)(9)(d)(5003.9.4) of rule 1301:7-7-50 of the Administrative Code, electrical wiring and equipment in outdoor storage areas containing unclassified detonable, Class I or II organic peroxides shall comply with the requirements for electrical Class I, Division 2 locations.

(c) **6204.2.3 Maximum quantities.** Maximum quantities of organic peroxides in outdoor storage shall be in accordance with Table 6204.1.2 *of this rule*.

(d) **6204.2.4 Storage arrangement.** Storage arrangements shall be in accordance with Table 6204.1.7 of this rule.

(e) **6204.2.5 Separation.** In addition to the requirements of *paragraph* (C)(9)(h)(5003.9.8) *of rule* 1301:7-7-50 *of the Administrative Code*, outdoor storage areas for organic peroxides in amounts exceeding those specified in Table 5003.8.2 *of rule* 1301:7-7-50 *of the Administrative Code* shall be located a minimum distance of 50 feet (15 240 mm) from other hazardous material storage.

(E) Section 6205 Use

(1) **6205.1 General.** The use of organic peroxides 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.



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