



## Zoning Resolution

THE CITY OF NEW YORK

Eric Adams, Mayor

CITY PLANNING COMMISSION

Daniel R. Garodnick, Chair

# **42-47 - Performance Standards Regulating Fire and Explosive Hazards**

File generated by <https://zr.planning.nyc.gov> on 4/1/2025

---

## 42-47 - Performance Standards Regulating Fire and Explosive Hazards

---

LAST AMENDED

6/6/2024

---

### 42-471 - Definitions

---

LAST AMENDED

6/6/2024

For the purposes of this Section, the following terms are defined:

Flammable or explosive

"Flammable or explosive" materials are materials which produce flammable or explosive vapors or gases under ordinary weather temperature, including liquids with an #open cup flash point# of less than 100 degrees F.

Free burning

"Free burning" materials are materials constituting an active fuel.

Intense burning

"Intense burning" materials are materials which by virtue of low ignition temperature, high rate of burning, and large heat evolution burn with great intensity.

Moderate burning

"Moderate burning" materials are materials which in themselves burn moderately and may contain small quantities of a higher grade of combustibility.

Open cup flash point

The "open cup flash point" is the temperature at which a liquid sample produces sufficient vapor to flash but not ignite when in contact with a flame in a Tagliabue open cup tester.

Original sealed containers

"Original sealed containers" are containers with a capacity of not more than 55 gallons.

## Slow burning

"Slow burning" materials are materials which will not ignite or actively support combustion during an exposure for five minutes to a temperature of 1,200 degrees F. and which, therefore, do not constitute an active fuel.

---

### 42-472 - Classifications

---

LAST AMENDED

6/6/2024

For the purposes of this Section, materials are divided into four classifications or ratings based on the degree of fire and explosive hazard. The rating of liquids is established by specified #open cup flash points# as set forth in this Section, and the Board of Standards and Appeals shall determine the rating of solids under this Section.

- (a) Class I includes #slow burning# to #moderate burning# materials. This shall include all liquids with an #open cup flash point# of 182 degrees F. or more.
- (b) Class II includes #free burning# to #intense burning# materials. This shall include all liquids with an #open cup flash point# between 100 and 182 degrees F.
- (c) Class III includes materials which produce #flammable or explosive# vapors or gases under ordinary weather temperature. This shall include all liquids with an #open cup flash point# of less than 100 degrees F.
- (d) Class IV includes materials which decompose by detonation, including but not limited to all primary explosives such as lead azide, lead styphnate, fulminates, and tetracene; all high explosives such as TNT, RDX, HMX, PETN, and picric acid; propellants and components thereof, such as nitrocellulose, black powder, boron hydrides, hydrazine, and its derivatives; pyrotechnics and fireworks such as magnesium powder, potassium chlorate and potassium nitrate; blasting explosives such as dynamite and nitroglycerine; unstable organic compounds such as acetylides, tetrazoles and ozonides; and strong oxidizing agents such as perchloric acid, perchlorates, chlorates, chlorites, or hydrogen peroxide in concentrations greater than 35 percent.

---

### 42-473 - Regulations applying to Class I materials or products

---

LAST AMENDED

6/6/2024

In all #Manufacturing Districts#, Class I materials or products may be stored, manufactured, or utilized in manufacturing processes or other production.

---

### 42-474 - Regulations applying to Class II materials or products

---

LAST AMENDED

6/6/2024

Class II materials or products may be stored, manufactured or utilized in manufacturing processes or other production only in accordance with the following provisions:

- (a) In M1 Districts

In M1 Districts, Class II materials or products shall be stored, manufactured, or utilized subject to the following limitations:

- (1) such storage, manufacture or utilization shall be carried on only within #buildings or other structures# which are #completely enclosed# by incombustible exterior walls;
- (2) such #buildings or other structures# shall either be set back at least 40 feet from any #lot lines# or, in lieu thereof, all such #buildings or other structures# shall be protected throughout by an automatic fire extinguishing system which shall comply with the requirements set forth in the Administrative Code, and all such structures as storage tanks shall be protected by a fire extinguishing system which shall comply with the requirements set forth in the Administrative Code; and
- (3) the storage of Class II materials or products shall be limited to 100,000 gallons.

(b) In M2 Districts

In M2 Districts, Class II materials or products may be manufactured or utilized without limitation. The storage of Class II materials or products shall be limited to 200,000 gallons, except that such limitation shall not apply to storage in underground tanks or storage of finished products in #original sealed containers#.

- (1) Special provisions applying along district boundaries

In M2 Districts and within 100 feet of the district boundary of a #Residence District#, a #Commercial District# or an M1 District, Class II materials or products shall be stored, manufactured, or utilized only in accordance with the provisions set forth in Section [42-474](#), paragraph (a), for M1 Districts.

(c) In M3 Districts

In M3 Districts, Class II materials or products may be stored, manufactured, or utilized without limitation.

- (1) Special provisions applying along district boundaries

In M3 Districts and within 100 feet of the district boundary of a #Residence District#, a #Commercial District# or an M1 District, Class II materials or products shall be stored, manufactured, or utilized only in accordance with the provisions set forth in paragraph (a) of this Section for M1 Districts.

---

## **42-475 - Regulations applying to Class III materials or products**

---

LAST AMENDED

6/6/2024

Class III materials or products may be stored, manufactured or utilized in manufacturing processes or other production only in accordance with the following provisions:

(a) In M1 Districts

In M1 Districts, Class III materials or products shall not be manufactured in any event, and shall be stored or utilized subject to the following limitations:

- (1) such storage or utilization shall be carried on only within #buildings or other structures# which are #completely enclosed# by incombustible exterior walls;
- (2) such #buildings or other structures# shall either be set back at least 40 feet from any #lot line# or, in lieu thereof, all such #buildings or other structures# shall be protected throughout by an automatic fire extinguishing system

which shall comply with the requirements set forth in the Administrative Code, and all such structures as storage tanks shall be protected by a fire extinguishing system which shall comply with the requirements set forth in the Administrative Code;

- (3) the final manufactured product shall have a rating of Class I; and
- (4) the storage of Class III materials or products shall be limited to 50,000 gallons.

(b) In M2 Districts

In M2 Districts, Class III materials or products shall not be manufactured in any event and shall be stored or utilized subject to the following limitations:

- (1) the final manufactured product shall have a rating of Class II; and
- (2) the storage of Class III materials or products shall be limited to 100,000 gallons, except that such limitation shall not apply to storage in underground tanks and storage of finished products in #original sealed containers#.
- (3) In M2 Districts, and within 100 feet of the district boundary of a #Residence District#, a #Commercial District# or an M1 District, Class III materials or products shall be stored or utilized only in accordance with the provisions set forth in paragraph (a) of this Section for M1 Districts.

(c) In M3 Districts

In M3 Districts, Class III materials or products may be stored, manufactured, or utilized without limitation.

- (1) Special provisions applying along district boundaries

In M3 Districts and within 400 feet of a #Residence District#, a #Commercial District# or an M1 District, the provisions set forth in paragraph (a) of this Section for M1 Districts shall apply. In M3 Districts and within 300 feet of the district boundary of an M2 District, no more than 200,000 gallons of Class III materials or products may be stored, except that such limitation shall not apply to storage in underground tanks or storage of finished products in #original sealed containers#.

---

## **42-476 - Regulations applying to Class IV materials or products**

---

LAST AMENDED

6/6/2024

Class IV materials or products shall not be manufactured in any #Manufacturing District# and may be utilized in manufacturing processes or other production in any #Manufacturing District# only when authorized by a special permit granted by the Board of Standards and Appeals in accordance with the provisions of Article VII, Chapter 3. No storage of Class IV materials or products is permitted in any #Manufacturing District# except such #accessory# storage as may be authorized by such special permit for the utilization of such materials or products in manufacturing processes or other production.

---

## **42-477 - Regulations applying to oxygen manufacture, storage, or utilization**

---

LAST AMENDED

6/6/2024

Oxygen, gaseous or liquid, shall not be manufactured in any #Manufacturing District# except when authorized by a special

permit granted by the Board of Standards and Appeals in accordance with the provisions of Article VII, Chapter 3. Oxygen, gaseous or liquid, may be stored or utilized in all #Manufacturing Districts# in accordance with the provisions set forth in the Administrative Code and subject to the following limitations:

(a) In M1 Districts

In M1 Districts, the total quantity of such oxygen stored shall not exceed 150,000 cubic feet at standard temperature and pressure.

(b) In M2 Districts

In M2 Districts, the total quantity of such oxygen stored shall not exceed 500,000 cubic feet at standard temperature and pressure.

(c) In M3 Districts

In M3 Districts, the total quantity of such oxygen stored is unlimited.