Tentative Interim Amendment

# NFPA 55

## Standard for the Storage, Use, and Handling of Compressed Gases and Cryogenic Fluids in Portable and Stationary Containers, Cylinders, and Tanks

**2005 Edition**

**Reference: Table 6.3.1**
**TIA 05-1**
*(SC 07-6-2/TIA Log #872)*

Pursuant to Section 5 of the NFPA Regulations Governing Committee Projects, the National Fire Protection Association has issued the following Tentative Interim Amendment to NFPA 55, *Standard for the Storage, Use, and Handling of Compressed Gases and Cryogenic Fluids in Portable and Stationary Containers, Cylinders, and Tanks,* 2005 edition. The TIA was processed by the Technical Committee on Industrial and Medical Gases, and was issued by the Standards Council on June 4, 2007, with an effective date of June 24, 2007.

A Tentative Interim Amendment is tentative because it has not been processed through the entire standards-making procedures. It is interim because it is effective only between editions of the standard. A TIA automatically becomes a proposal of the proponent for the next edition of the standard; as such, it then is subject to all of the procedures of the standards-making process.

*1. Revise Table 6.3.1 as follows:*

**Table 6.3.1 Maximum Allowable Quantity of Gases per Control Area (Quantity Thresholds for Gases Requiring Special Provisions)**

| Material | Unsprinklered Areas | | Sprinklered Areas | |
|---|---|---|---|---|
| | **No Gas Cabinet, Gas Room, or Exhausted Enclosure** | **Gas Cabinet, Gas Room, or Exhausted Enclosure** | **No Gas Cabinet, Gas Room, or Exhausted Enclosure** | **Gas Cabinet, Gas Room, or Exhausted Enclosure** |
| Corrosive Gas | | | | |
| Liquefied | 68 kg (150 lb) | 136 kg (300 lb) | 136 kg (300 lb) | 272 kg (600 lb) |
| Nonliquefied | 23 $m^3$ (810 $ft^3$) | 46 $m^3$ (1620 $ft^3$) | 46 $m^3$ (1620 $ft^3$) | 92 $m^3$ (3240 $ft^3$) |
| Cryogenic Fluid | | | | |
| Flammable | 0 L (0 gal) | 170 L (45 gal) | 170 L (45 gal) | 170 L (45 gal)* |
| Oxidizing | 170 L (45 gal) | 340 L (90 gal) | 340 L (90 gal) | 681 L (180 gal) |
| Inert | No limit | No limit | No limit | No limit |
| Flammable Gas | | | | |
| Liquefied | ~~114 L (30 gal)~~ 68 kg (150 lb) | ~~227 L (60 gal)~~ 136 kg (300 lb) | ~~227 L (60 gal)~~ 136 kg (300 lb) | ~~454 L (120 gal)~~ 272 kg (600 lb) |
| Nonliquefied | 28 $m^3$ (1000 $ft^3$) | 56 $m^3$ (2000 $ft^3$) | 56 $m^3$ (2000 $ft^3$) | 112 $m^3$ (4000 $ft^3$) |
| Highly Toxic Gas | | ~~2.3 kg (5 lb)~~ | | ~~4.5 kg (10 lb)~~ |

Copyright © 2007 All Rights Reserved
NATIONAL FIRE PROTECTION ASSOCIATION

Copyright National Fire Protection Association
Provided by IHS under license with NFPA
No reproduction or networking permitted without license from IHS
Not for Resale

| | | | | |
|---|---|---|---|---|
| Liquefied<br>Nonliquefied | 0 kg (0 lb)<br>0 $m^3$ (0 $ft^3$) | 1.8 kg (4 lb)<br>0.6 $m^3$ (20 $ft^3$) | 0 kg (0 lb)<br>0 $m^3$ (0 $ft^3$) | 3.6 kg (8 lb)<br>1.1 $m^3$ (40 $ft^3$) |
| ~~Nonflammable~~ Inert Gas<br>Liquefied<br>Nonliquefied | No limit<br>No limit | No limit<br>No limit | No limit<br>No limit | No limit<br>No limit |
| Oxidizing Gas<br>Liquefied<br>Nonliquefied | ~~57 L (15 gal)~~<br>68 kg (150 lb)<br>43 $m^3$ (1500 $ft^3$) | ~~114 L (30 gal)~~<br>136 kg (300 lb)<br>85 $m^3$ (3000 $ft^3$) | ~~114 L (30 gal)~~<br>136 kg (300 lb)<br>85 $m^3$ (3000 $ft^3$) | ~~227 L (60 gal)~~<br>272 kg (600 lb)<br>170 $m^3$ (6000 $ft^3$) |
| Pyrophoric Gas<br>Liquefied<br>Nonliquefied | 0 kg (0 lb)<br>0 $m^3$ (0 $ft^3$) | 0 kg (0 lb)<br>0 $m^3$ (0 $ft^3$) | 1.8 kg (4 lb)<br>1.4 $m^3$ (50 $ft^3$) | 3.6 kg (8 lb)<br>2.8 $m^3$ (100 $ft^3$) |
| Toxic Gas<br>Liquefied<br>Nonliquefied | 68 kg (150 lb)<br>23 $m^3$ (810 $ft^3$) | 136 kg (300 lb)<br>46 $m^3$ (1620 $ft^3$) | 136 kg (300 lb)<br>46 $m^3$ (1620 $ft^3$) | 272 kg (600 lb)<br>92 $m^3$ (3240 $ft^3$) |
| Unstable Reactive (Detonable) Gas, Class 3 or Class 4<br>Liquefied<br>Nonliquefied | 0 kg (0 lb)<br>0 $m^3$ (0 $ft^3$) | 0 kg (0 lb)<br>0 $m^3$ (0 $ft^3$) | 0.5 kg (1 lb)<br>0.3 $m^3$ (10 $ft^3$) | 1 kg (2 lb)<br>0.6 $m^3$ (20 $ft^3$) |
| Unstable Reactive (Nondetonable) Gas, Class 3<br>Liquefied<br>Nonliquefied | 1 kg (2 lb)<br>1.4 $m^3$ (50 $ft^3$) | 2 kg (4 lb)<br>3 $m^3$ (100 $ft^3$) | 2 kg (4 lb)<br>3 $m^3$ (100 $ft^3$) | 4 kg (8 lb)<br>6 $m^3$ (200 $ft^3$) |
| Unstable Reactive Gas, Class 2<br>Liquefied<br>Nonliquefied | 114 L (30 gal)<br>21 $m^3$ (750 $ft^3$) | 227 L (60 gal)<br>43 $m^3$ (1500 $ft^3$) | 227 L (60 gal)<br>43 $m^3$ (1500 $ft^3$) | 454 L (120 gal)<br>85 $m^3$ (3000 $ft^3$) |
| Unstable Reactive Gas, Class 1<br>Liquefied<br>Nonliquefied | No limit<br>No limit | No limit<br>No limit | No limit<br>No limit | No limit<br>No limit |

Note: The maximum quantity indicated is the aggregate quantity of materials in storage and use combined.
*A gas cabinet or exhausted enclosure is required. Pressure-relief devices or stationary or portable containers shall be vented directly outdoors or to an exhaust hood. (See 8.2.6.)

Copyright © 2007 All Rights Reserved
NATIONAL FIRE PROTECTION ASSOCIATION

Copyright National Fire Protection Association
Provided by IHS under license with NFPA
No reproduction or networking permitted without license from IHS
Not for Resale