## Safety Requirements for Compressed Gas Cylinders

1. Are cylinders stored in upright positions and immobilized by chains or other means to prevent them from being knocked over?  
   - Y  
   - N  
   - N/A  
   
   \[CGA\ 3.4.4\  and \ 29\  CFR\ 1910.101(b)]

2. Are cylinders stored away from highly flammable substances such as oil, gasoline, or waste?  
   - Y  
   - N  
   - N/A  
   
   \[CGA\ 3.3.6\]

3. Are cylinders stored away from electrical connections, gas flames or other sources of ignition, and substances such as flammable solvents and combustible waste material?  
   - Y  
   - N  
   - N/A  
   
   \[CGA\ 3.5.1\]

4. Are flammable gases separated from oxidizing gases in storage areas?  
   - Y  
   - N  
   - N/A  
   
   \[CGA\ 3.3.3\]

5. Are oxygen and fuel gas cylinders separated by a minimum of 20 feet or contain a fire resistant partition when in storage?  
   - Y  
   - N  
   - N/A  
   
   \[CGA\ 3.5.3\]

6. Are storage rooms for cylinders dry, cool and well ventilated?  
   - Y  
   - N  
   - N/A  
   
   The storage rooms should be fire resistant and the storage should not be in subsurface locations. Cylinders should be stored in secure areas at temperatures below 125ºF, away from radiators or other sources of heat.  
   
   \[CGA\ 3.3.5\]

7. Are cylinders stored away from incompatibles, excessive heat, continuous dampness, salt or other corrosive chemicals, and any areas that may subject them to damage?  
   - Y  
   - N  
   - N/A  
   
   \[CGA\ 3.3.7\  and \ 29\  CFR\ 1910.101(b)]

8. Is the storage area permanently posted with the names of the gases stored in the cylinders?  
   - Y  
   - N  
   - N/A  
   
   \[CGA\ 3.3.2\  and \ 29\  CFR\ 1910.101(b)]

9. Do all compressed gas cylinders have their contents and precautionary labeling clearly marked on their exteriors?  
   - Y  
   - N  
   - N/A  
   
   \[29\  CFR\ 1910.101(b)]

10. Are all compressed gas cylinder valve covers (valve protectors) in place when cylinders are not in use?  
    - Y  
    - N  
    - N/A  
    
    \[29\  CFR\ 1910.101(b)]
<table>
<thead>
<tr>
<th>Question</th>
<th>Y</th>
<th>N</th>
<th>N/A</th>
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</thead>
<tbody>
<tr>
<td>11. Are all compressed gas cylinders stored so they do not interfere with exit paths?</td>
<td>Y</td>
<td>N</td>
<td>N/A</td>
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<tr>
<td>[29 CFR 1910.101(b)]</td>
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<td>12. Are all compressed gas cylinders subjected to periodic hydrostatic testing and interior inspection?</td>
<td>Y</td>
<td>N</td>
<td>N/A</td>
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<tr>
<td>[29 CFR 1910.101(a)]</td>
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<tr>
<td>13. Do all compressed gas cylinders have safety pressure relief valves?</td>
<td>Y</td>
<td>N</td>
<td>N/A</td>
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<td>[29 CFR 1910.101(c)]</td>
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<tr>
<td>14. Are cylinders always maintained at temperatures below 125ºF?</td>
<td>Y</td>
<td>N</td>
<td>N/A</td>
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<td>[CGA 3.1.12]</td>
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<tr>
<td>15. Are safety relief devices in the valve or on the cylinder free from any indication of tampering?</td>
<td>Y</td>
<td>N</td>
<td>N/A</td>
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<td>[CGA 3.1.14]</td>
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<td>16. Is repair or alteration to the cylinder, valve, or safety relief devices prohibited?</td>
<td>Y</td>
<td>N</td>
<td>N/A</td>
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<tr>
<td>[CGA 3.1.15]</td>
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<td>17. Is painting cylinders without authorization by the owner prohibited?</td>
<td>Y</td>
<td>N</td>
<td>N/A</td>
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<td>[CGA 3.1.20]</td>
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<td>18. Are charged or full cylinders labeled and stored away from empty cylinders?</td>
<td>Y</td>
<td>N</td>
<td>N/A</td>
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<tr>
<td>[CGA 3.3.4 and 29 CFR 1910.101(b)]</td>
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<td>19. Is the bottom of the cylinder protected from the ground to prevent rusting?</td>
<td>Y</td>
<td>N</td>
<td>N/A</td>
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<tr>
<td>[CGA 3.3.9]</td>
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<tr>
<td>20. Are all compressed gas cylinders regularly inspected for corrosion, pitting, cuts, gouges, digs, bulges, neck defects and general distortion?</td>
<td>Y</td>
<td>N</td>
<td>N/A</td>
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<td>21. Are cylinder valves closed at all times, except when the valve is in use?</td>
<td>Y</td>
<td>N</td>
<td>N/A</td>
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<td>[29 CFR 1910.101(a)] [CGA 3.1.15]</td>
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<td>22. Are compressed gas cylinders always moved, even short distances, by a suitable hand truck and not dragged across the floor?</td>
<td>Y</td>
<td>N</td>
<td>N/A</td>
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<tr>
<td>[CGA 3.2.6]</td>
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23. Is using wrenches or other tools for opening and closing valves prohibited?  
[Y/N/N/A]  
[CGA 3.4.9]

24. Are suitable pressure regulating devices in use whenever the gas is emitted to systems with pressure-rated limitations lower than the cylinder pressure?  
[Y/N/N/A]  
[CGA 3.4.5]

25. Are all compressed gas cylinder connections such as pressure regulators, manifolds, hoses, gauges, and relief valves checked for integrity and tightness?  
[Y/N/N/A]  
[29 CFR 1910.101(a)]

26. Are all compressed gas cylinders regularly subjected to leak detection using an approved leak detecting liquid?  
[Y/N/N/A]  
[29 CFR 1910.101(a)]

Note: Ordinary soap solution may contain oils that can burn or explode when used with oxygen cylinders.

27. Is an approved leak-detection liquid used to detect flammable gas leaks?  
[Y/N/N/A]  
[CGA 3.5.2]

28. Are procedures established for when a compressed gas cylinder leak cannot be remedied by simply tightening the valve?  
[Y/N/N/A]  
[CGA 3.1.6]

The procedures should include the following:  
a. Attach tag to the cylinder stating it is unserviceable.  
b. Remove cylinder to a well ventilated out of doors location.  
c. If the gas is flammable or toxic, place an appropriate sign at the cylinder warning of these hazards.  
d. Notify the gas supplier and follow his/her instructions as to the return of the cylinder.

29. Are students/employees prohibited from using compressed gases (air) to clean clothing or work surfaces?  
[Y/N/N/A]  
[29 CFR 1910.101(b)]

30. Are compressed gases only handled by experienced and properly trained people?  
[Y/N/N/A]  
[CGA 3.4.1]