

# Minor storage of gases allowed within buildings without Fire Protection requirements

Table 1- Minor Storage

Maximum Quantities of Gas Permissible for Classification as <u>Minor Storage</u> *					
GHS Pictogram	Dangerous Goods Class	Part 1 - Laboratories/ Workshops or internal area		Part 2 - Stores	
		Maximum water capacity L	Maximum quantity allowed of all combined classes of gasses	Maximum water capacity L	Maximum quantity allowed of all combined classes of gasses
 Flammable Gas	Class 2.1 	250 L 5 x G (50 L) Size	1000 L	500 L	2000 L
 Inert Gas	Class 2.2 	1000 L 20 x G (50 L) Size			
 Toxic Gas	Class 2.3 	25 L 2 x D (10 L) or 1 x E (20 L) allowed			
 Oxidizing Gas	Class 2.2/5.1 	500 L 10 x G (50 L) Size			

\*The storage of gases in accordance with the information provided in Table 1 - Minor Storage

## Risk Management of Gases

Hazard	Possible Control Measures	Calculating maximum volumes of gasses in a facility
<b>Asphyxiation</b>	<ul style="list-style-type: none"> <li>• O2 Monitor,</li> <li>• External facilities/ Caged areas or Vented walls,</li> <li>• Mechanical ventilation,</li> <li>• Shut off valves</li> </ul>	<p>Monash OH&amp;S are able to calculate the possible maximum quantities of gas allowable in a given room volume. Please contact General Enquiries: 9905 1016</p>
<b>Explosion/Fire</b>	<ul style="list-style-type: none"> <li>• Lower Explosive Limit (LEL) Monitors,</li> <li>• Fire protection infrastructure,</li> <li>• Flash back arrestors,</li> <li>• Shut off valves</li> </ul>	
<b>Poisoning</b>	<ul style="list-style-type: none"> <li>• Specific gas Monitors,</li> <li>• Shut off valves</li> </ul>	
If you do not have adequate controls systems in place, please contact Monash OH&S to assist you in identifying required control strategies.		

## Segregation distances from stores and places of congregation (For gas cages)

GHS Pictogram	Combined Storage Allowance in (L)	Separation* distance required in	(m)		
		 <b>Class 2.1</b>	 <b>Class 2.2</b>	 <b>Class 2.2/5.1</b>	 <b>Class 2.3 (&gt;50L)</b>
<b>On-Site Protected Place - Any area within a building where gases are stored.</b>	≤ 500	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>
	>500 ≤1000	<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>
	>1000 <2000	<b>3</b>	<b>0</b>	<b>3</b>	<b>5</b>
	>2000	<b>3</b>	<b>3</b>	<b>3</b>	<b>8</b>
<b>Protected Place – Any external area within or external to Monash University boundary</b>	< 500	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>
	>500 <1000	<b>3</b>	<b>0</b>	<b>0</b>	<b>5</b>
	>1000 <2000	<b>3</b>	<b>0</b>	<b>3</b>	<b>8</b>
	>2000	<b>6</b>	<b>5</b>	<b>5</b>	<b>15</b>
<b>Filling or Decanting Areas</b>	< 500	<b>3</b>	<b>3</b>	<b>3</b>	<b>3</b>
	>500 <1000	<b>3</b>	<b>3</b>	<b>3</b>	<b>5</b>
	>1000 <2000	<b>3</b>	<b>3</b>	<b>3</b>	<b>8</b>
	>2000	<b>5</b>	<b>3</b>	<b>5</b>	<b>15</b>