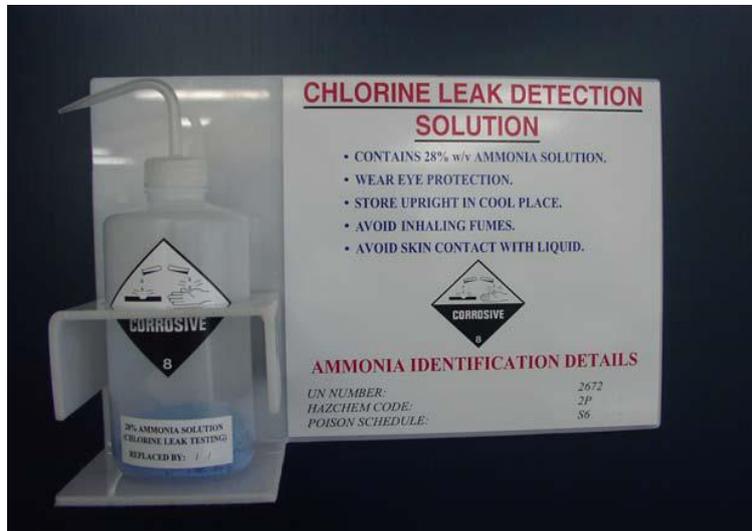


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Purpose

The purpose of this specification is to describe the requirements for ammonia bottle stations used at Water Corporation sites that store and handle chlorine drums or cylinders.

Scope

This specification applies to all Water Corporation chlorine facilities. The use of ammonia puffer bottles to check for chlorine leaks is mandatory and as such, ammonia puffer bottles must be available on site.

Definitions

SDS Safety Data Sheet

References

AS/NZS 2927:2019 - The Storage and Handling of Liquefied Chlorine Gas

Dangerous Goods Safety (Storage and Handling of Non-explosives) Regulations 2007 WA

Specification

The **SINGLE AMMONIA BOTTLE STATION** is a complete unit made from PVC and a soft plastic puffer bottle that can be obtained by contacting Water Treatment, Engineering - 9420 2300.

- The **Single Ammonia Bottle Station** should be wall mounted to hold the bottle in an upright position in an area away from the chlorine storage room, such as a control room. The rationale behind this is that personnel may need to test for chlorine leaks before entering the storage area. For large facilities, it is permitted to have a second Single Ammonia Bottle Station located in the chlorine store room if this is operationally preferred. This second unit should only be used for routine operations such as during drum/cylinder changeover, and not for leak investigation.
- The **Single Ammonia Bottle Station** has safety information regarding the chlorine leak detection solution, plus ammonia identification details. The ammonia solution bottle size is 500mL with a corrosive 8 class label and an expiry date label.
- The **Single Ammonia Bottle Station** comes with a round piece of sponge inserted into the bottom of the bottle. This will absorb most of the ammonia solution enabling the use of these bottles at most angles without discharging liquid ammonia. The bottle is designed with a short tube to ensure only ammonia vapour is withdrawn when “puffed”, as ammonia liquid is hazardous to the skin and eyes.
- Ammonia solution is volatile and will evaporate over time resulting in a loss of the solution strength that will reduce the effectiveness of chlorine gas detection. **Ammonia solution must be replaced every three months as a minimum.**
- When replenishing the bottle with fresh ammonia solution, only enough liquid shall be placed in the bottle so that the amount does not exceed the top level of the sponge.
- The small amount of weak ammonia solution that is left in the puffer bottle should be disposed into an outside drain and diluted with a copious amount of water. The puffer bottle should be then replenished with fresh 20-28% w/v of ammonia from the bulk container.
- This activity should be conducted in a well ventilated area and appropriate PPE shall be worn (i.e. safety glasses, gloves and protective clothing)

NOTE: For more information concerning the properties of ammonia, consult the SDS on [ChemAlert](#)

Document Revision History	
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