

Final learning assessment

Fill in the blanks in the following sentences:

1. Many compounds are unstable and can _____ rapidly, examples are **inorganic** and **organic** _____, **chlorates** and **perchlorates**. Avoid grinding and drying operations conducted with unstable compounds as they could _____ and cause _____.
2. **Pyrophoric materials** (e.g. lithium alkyls, metal hydrides) spontaneously combust on contact with _____: take extreme care when handling these materials.
3. Avoid adding _____ to a concentrated acid. Adding acid to _____ is an inherently safer process.
4. Keep the maximum size of bench containers less than _____ ml. This reduces the risk of _____ and consequence from an incident.
5. Work equipment constructed from glass needs special consideration when used above or below _____ pressure. The stored energy involved means that any breakages will be accompanied by flying glass, so items such as glass vacuum desiccators should be protected with a _____ framework or _____. Admit air carefully and _____ before opening.
6. Wear gloves when handling chemicals. They should be of a suitable material to offer protection from the substance in use. Information is contained in the _____ _____ _____ on suitable gloves.
7. Consult manufacturers' charts to check '_____ times'. Discarded gloves maybe classified as _____ waste for disposal purposes.
8. The _____ should be kept _____ when you are not actively working in at the fume cupboard. In the event of an explosion, the _____ acts as a shield and it also provides containment in the event of fire.
9. Keep electrical equipment away from _____ materials and from water.
10. If you are storing flammable materials in a fridge, then make sure that the fridge is rated for flammable atmospheres, i.e. it is '_____ free'.
11. Any spillages on the bench should be cleaned up _____, while being mindful of the nature of the chemicals involved.
12. Burns can be _____ or chemical. They should be immersed in cold _____ immediately, or washed in running water for a length of time to cool or removed from contamination before covering with a dry dressing.
13. Be aware of the emergency _____ _____ measures required. Specifically, take note of the materials being used and the advice given on the safety data sheet (SDS) for the treatment of exposure.

