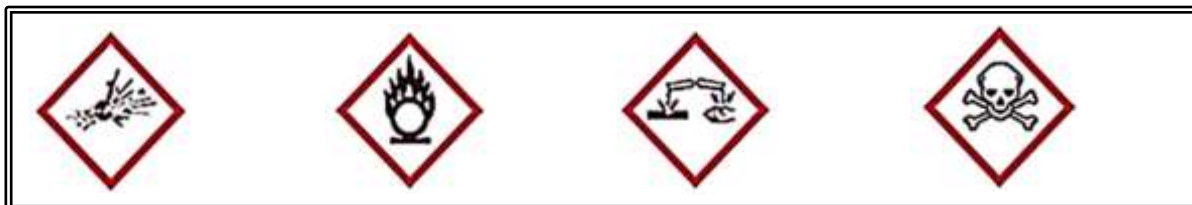


YEAR 13 CHEMISTRY WORKSHEET 1 - 2021

Strand 1: General Chemistry

1. Name the chemical hazard symbols shown below.



(i) _____ (ii) _____ (iii) _____ (iv) _____

2. Describe how leftover **harmless soluble** salts such as CaCl_2 and MgSO_4 should be disposed.

3. **Product X** can be prepared by **process A** and **process B**. **Process A** has an atom economy of **30 %** whereas **process B** has an atom economy of **80 %**.

(i) Identify the **process** which is greener.

(ii) Provide a reason for your answer to part (i) above.

4. Calculate the atom economy for the preparation of NH_3 from $(\text{NH}_4)_2\text{SO}_4$.



[$M(\text{H}_2\text{SO}_4) = 98$; $M(\text{NH}_3) = 17$]