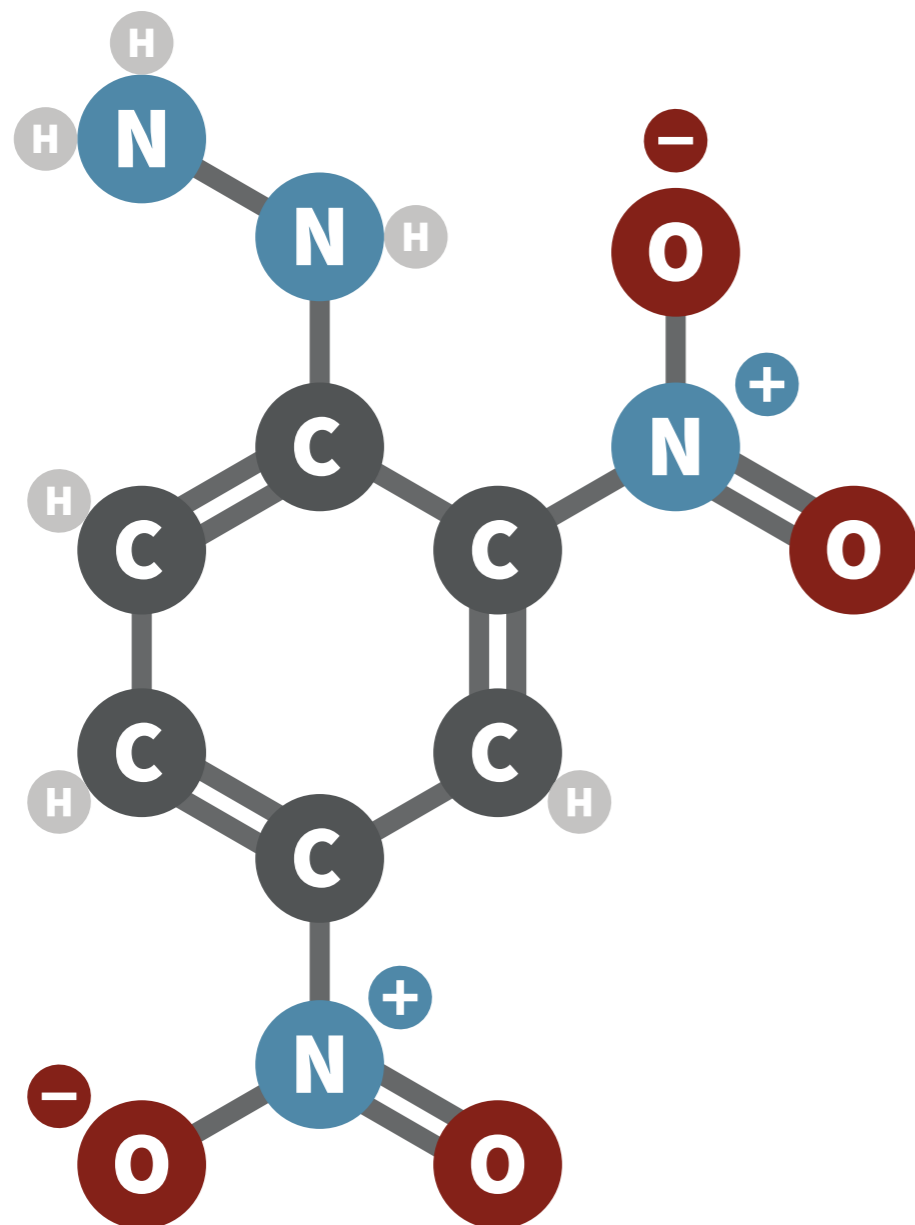


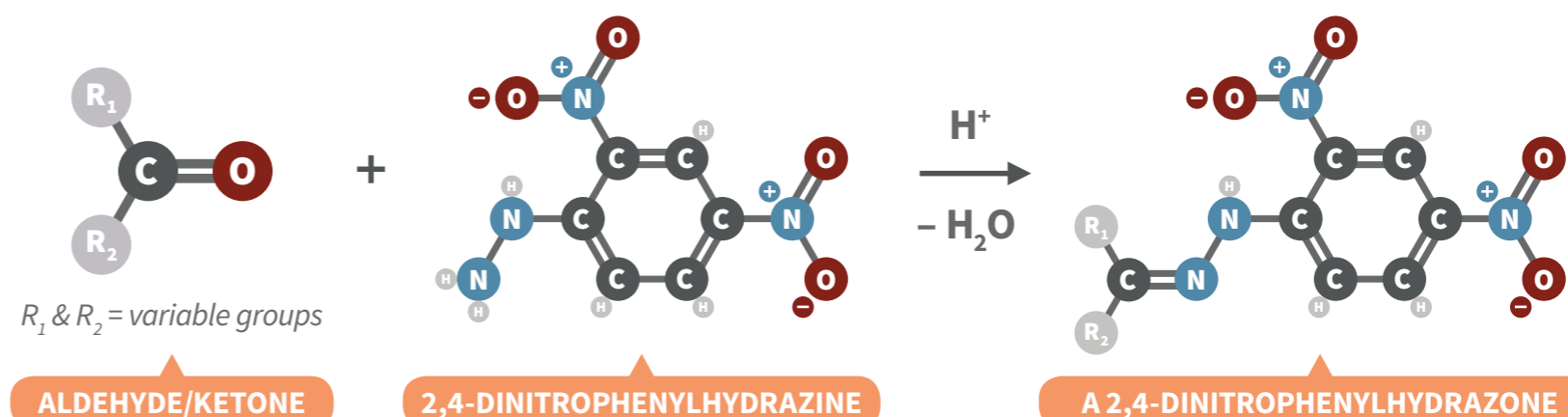
2,4-DINITROPHENYLHYDRAZINE: USES AND RISKS

UK schools have recently been disposing of incorrectly stored 2,4-DNPH. Here we look at what it is and the risks it can pose.



2,4-DINITROPHENYLHYDRAZINE

WHAT IS 2,4-DNPH USED FOR?



2,4-DNPH can be used to identify aldehydes and ketones. It is commonly used in a mixture of methanol and sulfuric acid, and reacts with aldehydes and ketones to form an orange-yellow precipitate called a 2,4-dinitrophenylhydrazone. After purification the 2,4-dinitrophenylhydrazone's melting point can help identify the specific aldehyde or ketone that was used in the reaction.

STORING 2,4-DNPH CORRECTLY AND SAFELY



DRY

FRICITION SENSITIVE

SHOCK SENSITIVE

DAMP

PERFECTLY SAFE TO OPEN AND USE

2,4-DNPH is supplied damp; It's recommended that the bottle of damp solid is stored inside a larger container with a small amount of water at the bottom. If it hasn't been stored like this, or if there is no water in the outer container, schools have been told to assume it has dried out, and the bottle should not be opened due to the risk of a small fire or explosion; in the UK, CLEAPSS should be contacted.

