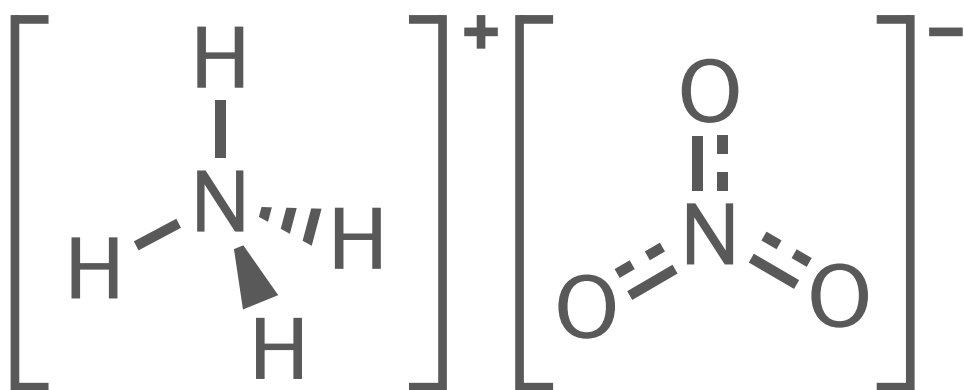


WHAT IS AMMONIUM NITRATE?

WHAT IS AMMONIUM NITRATE?



AMMONIUM NITRATE

Ammonium nitrate is a crystalline white solid. It's made in large quantities industrially by the reaction of ammonia with concentrated nitric acid.



AMMONIA

NITRIC ACID

AMMONIUM NITRATE

Ammonium nitrate's major use is in fertilisers as a source of nitrogen. It's also used in some explosive mixtures for mining and quarrying as an oxidising agent.

APPROXIMATE PERCENTAGE USAGE OF AMMONIUM NITRATE



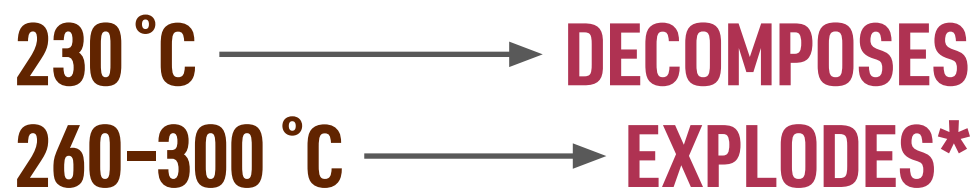
APPROX.
78%



APPROX.
22%

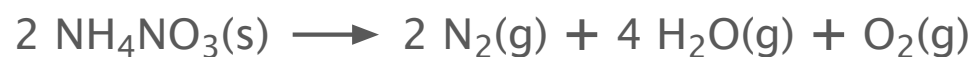
AMMONIUM NITRATE EXPLOSIONS

Pure ammonium nitrate does not explode easily and can be handled safely. The risk of explosion increases if it is contaminated with impurities. It decomposes at high temperatures and if confined can explode.



*if confined

When ammonium nitrate decomposes, it primarily breaks down into a number of gases: nitrogen, water vapour and oxygen. This rapid release of gas causes an explosion.



AMMONIUM NITRATE

NITROGEN, WATER VAPOUR AND OXYGEN

Various other reactions occur during decomposition. These make other gases, such as nitrogen dioxide and ammonia. Nitrogen dioxide causes the orange-red colour sometimes seen in smoke from these explosions.



AMMONIA



NITROGEN DIOXIDE



NITROUS OXIDE

