

On the spot: Farm fire

ON A FARM..



Answer to *On the spot*

Ammonium nitrate is indeed explosive, but only in certain circumstances. Several large incidents have resulted from fires around ammonium nitrate where circumstances have led to detonation, such as in Oppau, Germany, 1921, or in West, US, 2013. However, these examples were not simply fires that caused the detonation. A fire near fertilisers will not cause detonation unless the stack is contaminated or suitably confined. In order for confinement to occur, typically the fertiliser will melt and then solidify in a confined area such as a pipe or drain. This can lead to detonation, as can contaminating the fertiliser with organic material such as straw, grease or oil. Otherwise, keeping the stack damp and out of the fire will be sufficient to reduce the detonation risk, fighting from a protected position with remote monitors will reduce the risk to fire fighters.

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