

4 JUL 1973

41238

*Issued under the authority of
The Home Office (Fire Department) and the Scottish Home and Health Department
Crown copyright reserved*

**HOME OFFICE (FIRE DEPARTMENT)
SCOTTISH HOME AND HEALTH DEPARTMENT**

TH
9151
• TB

**TECHNICAL BULLETINS
Issue No. 1/1973 (England and Wales)
Issue No. 1/1973 (Scotland)**

**IDENTIFICATION OF FERTILIZERS INVOLVED IN FIRES
AMMONIUM NITRATE FERTILIZERS**

1. U.K. fertilizer manufacturers have made the following information available to help firemen identify (i) fertilizers which consist of almost pure ammonium nitrate and which are sold under brand names, and (ii) mixed fertilizers.

Fertilizers consisting of almost pure ammonium nitrate are sold in packages similar to those illustrated in the appendix to this bulletin and usually have a nitrogen (N) content between 33.0 % and 34.5 %. They will not burn but they are oxidising agents and may enable combustible materials to continue burning in the absence of air. They can produce poisonous fumes when heated. Strong confinement accompanied by heat may lead to very violent reaction especially if there is contamination by organic materials such as oil, grease or sawdust.

Mixed fertilizers contain other chemicals such as phosphates and potash (expressed as P_2O_5 and K_2O). They may be identified by figures such as 15.15.21 on the packages, showing respectively the proportions of nitrogen, phosphate and potash. They are not normally oxidising agents although they will probably contain some ammonium nitrate. If involved in a fire they may give off poisonous fumes, and some are capable of self-sustaining decomposition. Unless there is evidence to the contrary, all mixed fertilizers should be treated as if they contain ammonium nitrate.

2. Technical Bulletin No. 1/1971 describes more fully the properties of fertilizers containing ammonium nitrate, also the problems which may arise and the measures to be adopted if they are involved in fire.

HOME OFFICE (FIRE DEPARTMENT)
SCOTTISH HOME AND HEALTH DEPARTMENT
June 1973

FIR/61 15/40/4
A/PBL/2/C20

8734

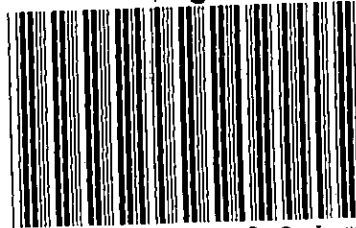
By the undersigned, Secretary of the
Board of Trustees of the Fire Service College
of the State of California

OFFICE OF THE SECRETARY
OF THE BOARD OF TRUSTEES

1000 UNIVERSITY AVENUE
SACRAMENTO, CALIFORNIA 95833
(916) 441-1111



**The Fire Service
College**



* 0 0 0 8 0 0 2 8 1 *

FERTILIZERS SOLD IN THE BAGS SHOWN
CONSIST OF ALMOST PURE AMMONIUM NITRATE

