

# GUIDANCE FOR **SAFE AND SECURE STORAGE OF FERTILIZERS ON FARMS**



2009 Edition  
Issue 2012



# **GUIDANCE FOR SAFE AND SECURE STORAGE OF FERTILIZERS ON FARMS**

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## **DISCLAIMER:**

This document has been produced for the benefit of the members of Fertilizers Europe. The information and guidance provided in this document is given in good faith. Fertilizers Europe, its members, consultants and staff accept no liability for any loss or damage arising from the use of this guidance. As regulations are up-dated from time to time, readers are advised to consult the up-to-date information.

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## 1. INTRODUCTION

This Guidance aims to raise awareness amongst the farming community of the need to ensure the safe and secure storage of fertilizers on the farm and to recommend the relevant good practice. It covers all agricultural fertilizers. However, particular care needs to be taken when storing ammonium nitrate-based fertilizers, which can be stolen and used by terrorists to make explosive devices.

## 2. GENERAL

Fertilizers can become a major source of contamination of ground and surface water if not stored correctly. Wherever possible, fertilizer should be stored at least 10 metres away from a watercourse or field drain and well away (e.g. 50 metres) from a borehole, well etc. to avoid contamination.

Where possible, fertilizers should be stored in an enclosed, secure store. If this is not possible, they should be sheeted to provide protection from the weather (sun, rain etc.) and to reduce the risk of theft.

Follow good house-keeping practices, cleaning up spills and keeping walls, floors and equipment clean. Avoid leakage from handling equipment e.g. fuel, oil and hydraulic fluid. Avoid damaging fertilizer during handling.

Store away from heating systems and other potential sources of heat such as fuel tank and oil drums. taking account of any special features for fire control e.g. provision of double-wall or underground location. Do not permit smoking.

Materials which can react with ammonium nitrate-based fertilizers such as chemicals, oil, pesticides or combustible materials (e.g. wood, hay, and straw) should not be present or kept near the fertilizer.

### 3. INSIDE STORAGE

The store should preferably be single storey and ideally be constructed of not-readily combustible material e. g. concrete, brick, steel or asphalt. It should be well ventilated and the floor should have a level, dry and even surface, free from pot-holes. If possible, bagged fertilizers should be stored on pallets.

The store should be cleaned before, during and after product is delivered. It should be regularly inspected and stock checked or records of inputs/outputs kept so that an accurate inventory is known at any time.

Limit the size of stacks of bags of ammonium nitrate-based fertilizers in accordance with national regulations, if any.

Store at least 1 metre away from eaves and beams and, in case of bagged fertilizer, also from walls and other stacks of fertilizer.

Do not store different bagged fertilizers in the same stack.

Do not store urea near ammonium nitrate based fertilizers; keep them well segregated, as they are not compatible.

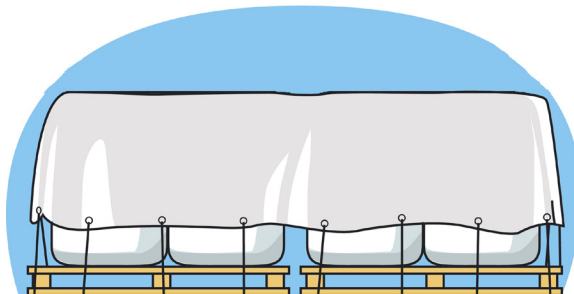
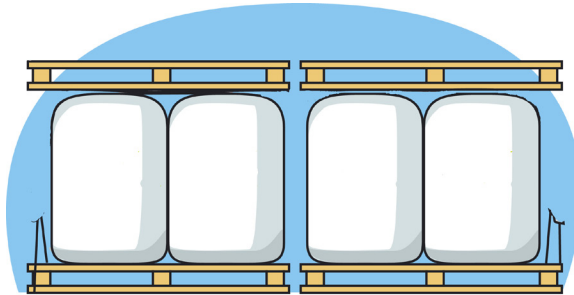
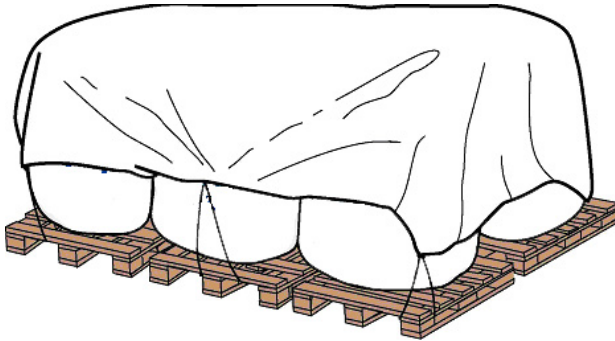


## 4. OUTSIDE STORAGE












Store on a raised level, well-drained, dry and smooth surface (e.g. on pallets).

Place a layer of empty pallets on top of the stack prior to sheeting to prevent product deterioration due to heat effects, as advised by the manufacturer/supplier, in order to preserve quality.

Stacks should be sheeted and the sheets secured to the bottom layer of the stacks to prevent damage, which may be caused by rubbing and friction.



## 5. ADVICE TO ENSURE SECURE STORAGE OF AMMONIUM NITRATE BASED FERTILIZERS ON THE FARM

DON'Ts	DO's
<p> <b>Do not</b> store them where there is public access.</p> <p> <b>Do not</b> leave them in the field overnight.</p> <p> <b>Do not</b> store them near to, or visible from, the public highway.</p> <p> <b>Do not</b> re-sell the fertilizer unless the purchaser is personally known by you to be a bona-fide farmer user and is aware of the need to follow this guidance.</p>	<p> <b>Do</b> follow any national regulations.</p> <p> <b>Do</b> record deliveries and usage of these fertilizers.</p> <p> <b>Do</b> store them inside a locked building or compound wherever possible, following guidance from safety/security authorities.</p> <p> <b>Do</b> fully sheet the fertilizer stack stored outside and regularly check to ensure that the stack has not been tampered with.</p> <p> <b>Do</b> carry out regular stock checks.</p> <p> <b>Do</b> report immediately any stock discrepancy or loss to the police or other appropriate authority in your country.</p> <p> <b>Do</b> record particulars of supplier and delivery, any manufacturers' code numbers from the delivery papers and any other relevant information, if available, for traceability, security and safety purposes.</p>

## 6. SAFE HANDLING OF BIG-BAGS (IBC'S)

- Equipment used for lifting IBC's must have smooth rounded edges.
- The lift should be smooth, vertical with plenty of space and the bags not left suspended.
- The bags must not be allowed to slide along the tines of the lifting equipment.
- No one should stand beneath or close to the bag when being lifted, moved or emptied.
- Particular care should be taken when cutting the bag e.g. ideally use a long-handled knife.

## 7. RESPONSIBLE CARE

Good storage practices will preserve the quality and spreadability of your fertilizer; follow the storage guidance available from your supplier, producer, fertilizer association or relevant government department/ministry.

For more detailed guidance, visit the Fertilizers Europe website:

[www.fertilizerseurope.com](http://www.fertilizerseurope.com)



## **product stewardship fertilizers**

Product Stewardship is defined as “the management of the safety, health and environmental aspects of a product throughout its lifecycle in an ethically responsible way”. It is Responsible Care as applied to products. In our application of Product Stewardship we cover the total value chain, but also address additional issues such as Best Practices that are not necessarily just dealing with the product characteristics.

The scope is limited to EU legislation and does not cover any specific National Requirements.

The Product Stewardship Program covers mineral fertilizers, their raw materials and intermediate products.

**[www.productstewardship.eu](http://www.productstewardship.eu)**



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