

Infinite **product stewardship**



Fertilizer storage on farms



Raw
materials

Product
development

Fertilizer
production

Distribution
& storage



Continuing to feed the world

This guidance aims to raise awareness amongst the farming community of the need to ensure the safe and secure storage of liquid and solid fertilizers on the farm and to recommend the relevant good practice. It covers all mineral fertilizers. Particular care needs to be taken so that fertilizers can't be stolen and misused.

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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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 inside a locked building. 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 keep 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 exposed light bulbs. Do not permit smoking, welding or burning.
- Materials which can react with fertilizers such as chemicals, oil, pesticides or combustible materials (e.g. wood, hay, straw, fuel tanks, oil drums) should not be present or kept near the fertilizer.
- 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.



Inside storage

THE STORE SHOULD PREFERABLY BE SINGLE STOREY AND BE CONSTRUCTED OF NOT-READILY COMBUSTIBLE MATERIAL (e.g. CONCRETE, BRICK OR STEEL).

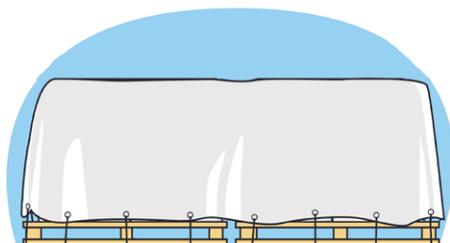
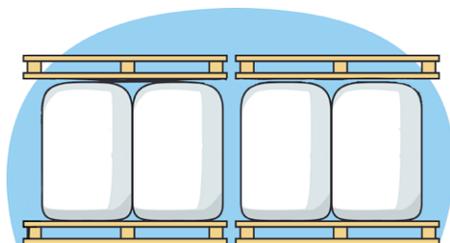
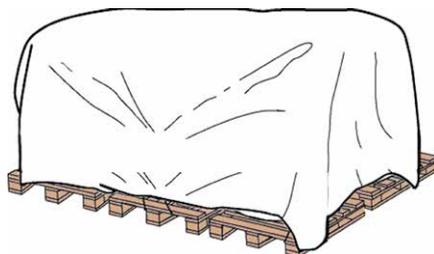
- The store should be well ventilated and the floor should have a level, dry and even surface, free from pot-holes.
- The store should be cleaned before product is delivered and kept tidy. It should be regularly inspected and stock checked or records of inputs/outputs kept so that an accurate inventory is known at any time.
- Limit the size of stacks of bags of 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 incompatible products (such as AN and urea) near each other (see compatibility matrix in the Guidance for compatibility of fertilizer blending materials on www.fertilizerseurope.com); keep them well segregated.



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 pallet to prevent damage, which may be caused by rubbing and friction.



Advice to ensure secure storage of fertilizers on the farm

Do's

- Do follow all national regulations.
- Do record deliveries and usage of these fertilizers.
- Do store them inside a locked building or compound wherever possible, following guidance from safety/security authorities.
- Do fully sheet the fertilizer stack stored outside and regularly check to ensure that the stack has not been tampered with.
- Do carry out regular stock checks.
- Do report immediately any stock theft or loss to the police or other competent authority in your country. Do report suspicious behaviour.
- Do 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.

DON'TS

- Do not store them where there is public access.
- Do not leave them in the field overnight.
- Do not store them near to, or visible from, the public highway.
- Do not 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.

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.
- Do not reuse big bags, dispose in accordance with national regulations.

Reporting loss and suspicious behaviour

- In order to prevent the misuse of fertilizers, everyone is obliged to report any loss or theft of fertilizer to the police or competent authority. The same goes for suspicious behaviour by unknown people.



Product Stewardship

Good storage practices will preserve the quality and spreadability of your fertilizer; we also recommend that you follow the storage guidance available from your supplier, producer, fertilizer association or relevant government department/ministry. For more detailed guidance, check the Fertilizers Europe publications on the website: www.productstewardship.eu



product stewardship
fertilizers



This brochure is published under Fertilizers Europe's Infinite Product Stewardship initiative within Infinite Fertilizers to increase the efficient use of nutrients and reduce the carbon footprint of food production. Product Stewardship is defined as "management of the safety, health and environmental aspects of a product throughout its life cycle in an ethically responsible way". It is Responsible Care applied to products. Fertilizers Europe's application of Product Stewardship covers the total value chain as well as addresses additional issues such as Best Practice, which do not not necessarily only deal with product characteristics. The scope of its Product Stewardship Program is limited to EU legislation and does not cover any specific national requirements. It covers mineral fertilizers, their raw materials and intermediate products.

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