

1. Product name

- a) trade name
- in Polish - ZAKsan®
 - in English - Ammonium nitrate (AN), granulated
 - in German - Ammoniumnitrat, granuliert
- b) chemical name:
- in Polish - mieszanina azotanu amonu z węglanem wapnia i węglanem magnezu
 - in English - mixture of ammonium nitrate with calcium carbonate and magnesium carbonate
 - in German - Mischung von Ammoniumnitrat mit Kalziumcarbonat und Magnesiumcarbonat
- c) type of fertiliser
- in Polish - Azotan amonu z wypełniaczem
 - in English - Ammonium nitrate with filler
 - in German - Ammoniumnitrat mit Füllstoff
- d) chemical formula - $\text{NH}_4\text{NO}_3 + \text{CaMg}(\text{CO}_3)_2$
- e) PKWiU symbol 20.15.35.0
- f) CN symbol 3102 40 90

2. Quality requirements
2.1. General requirements

ZAKsan® has the form of loose granulated matter, coloured beige to brown.

2.2. Physical and chemical requirements

Parameter	Value	Test method	Foreign equivalent
a) Total nitrogen as a sum of ammoniacal nitrogen and nitric nitrogen, % (w/w), within the range, including:	32.0±0.8	In-house method of Grupa Azoty ZAK S.A.	EN 15476:2009
b) nitric nitrogen, % (w/w), within the range	16.0±0.4	In-house method of Grupa Azoty ZAK S.A.	EN 15604:2012
c) ammoniacal nitrogen, % (w/w), within the range	16.0±0.4	In-house method of Grupa Azoty ZAK S.A.	EN 15475:2009
d) loss on drying, % (w/w), not more than	0.5	PN-C-87054:2000	-
e) grain class: content of 2-5 mm granules, % (w/w), at least	95	PN-EN 1235:1999/A1:2004	EN 1235:1999/A1:2003

3. Intended use

ZAKsan® is used as a fertiliser.

4. Shelf-life

Subject to compliance with storage and transport conditions as per item 7 and 8, shelf-life of the fertiliser is indefinite.

5. Document confirming product quality

Each exported batch of the fertiliser shall be accompanied with a quality certificate stating the conformity of the fertiliser quality parameters with the requirements of the product sheet, unless otherwise stated in the customer contract.

6. Packing

ZAKsan® is packed to:

- 500-1000 kg big-bag packaging,
- other packaging and of different sizes ensuring fertiliser safety during storage, transport, handling and use sealed in a way or with the use of such device that each attempt of its opening results in irreversible damage to the closing, seal or packaging itself.

In case of exported fertiliser, the type and size of packaging is as agreed with the recipient.
Packaging should meet the requirements of the RID and ADR provisions for packing group III.

6.1 Labelling

If the fertiliser is sent to a domestic recipient, the outer side of packaging should be affixed, according to item 6, with permanent label or stick with inscription containing at least the following data:

- a) "EC FERTILISER" inscription,
- b) fertiliser type specification, A.1.5,
- c) quantity and chemical forms of nitrogen (N),
- d) net weight,
- e) name and address of manufacturer,
- f) fertiliser trade name, according to item 1.a,
- g) instruction of use, storage and transport instructions,
- h) handling marks according to PN-EN ISO 780:2016-03, mark no. 10, no. 11, no. 14, no. 16,
- i) information on potential hazard caused by fertiliser,
- j) information on the procedure to avoid the risk posed by the fertiliser and procedure to be followed in presence of such risk,
- k) manufacturing date,
- l) Inscription reading "Agricultural employers CANNOT store the product with other fertilisers".

In the case of fertiliser exported to the EC states, packaging should be labelled according to item a),b),c),d),e), and the remaining labelling should be as agreed with the recipient.

In case of fertiliser exported outside the EC, the type and size of packaging is as agreed with the recipient.

7. Storage

Due to hygroscopicity, ZAKsan® should be stored in packaging labelled according to item 6 in clean and dry warehouse buildings of non-flammable and moisture insulated floor surface. The fertiliser should be protected against water, precipitations, direct sun and heating above 30°C. No open fire is allowed in premises with stored ammonium nitrate. Power cables should be protected against short circuits.

Keep ZAKsan® away from potentially reactive chemical compounds and materials, including among others: plant protection products, fertilisers containing chlorides, organic substances, strong alkaline substances /e.g. lye soda/, lime, cement, powdered metals, metal oxides, acids and flammable materials, such as: coal, sawdust, greases and propellants.

ZAKsan® can be stored only near the calcium ammonium nitrate fertilisers.

Fertiliser in 50kg packages should be placed horizontally, up to a maximum of 12 layers, in flexible containers (big-bags) 500kg and 600kg should be stored in two layers.

Packaging should be placed in a distance of at least 1.5 m from the heat sources and 0.2 m from the warehouse wall. Damaged packaging should be stored separately. Non-compliance with the above rules may affect the quality and cause uncontrolled decomposition of fertiliser. Handling and storage of more than 1250 Mg of ammonium nitrate in an establishment classifies a given entity as the major accident hazard lower-tier establishment and above 5000 mg as major accident hazard higher-tier establishment - Table 2 (see explanation No 14 to the Table) to the Ordinance of the Minister of Development of 29 January 2016 (Journal of Laws, item 138).

Note

- Agricultural employers cannot store ZAKsan® with other fertilisers.
- ZAKsan® should not be stored in bulk.

7.1 Labelling of warehouse facilities

Storage site for fertiliser in unit packaging should be labelled with a plate containing the fertiliser name and manufacturing date. In factory warehouses of the points of sales, the plate contains also: date of piling, percentage content of pure ingredient.

8. Transport

ZAKsan® in unit packaging should be transported with any covered means of transportation, subject to the provisions of item 7. Fertiliser should be protected against atmospheric conditions and contamination. Means of transportation should be clean, dry and tight and their condition should not cause any damage to packaging. The vehicles and containers should be constructed in a way to prevent any contact between transported fertiliser with flammable materials and chemical

compounds that may potentially react with fertiliser, listed in item 7. In case the floor or walls of the vehicle are made of wood or flammable materials, these should be covered with impermeable and non-flammable lining or secured with non-flammable impregnating agent e.g. sodium silicate solution (water glass).

Transport in bulk on vehicles meeting the requirements of RID/ ADR regulations is allowed, including special conditions:

- carriage in bulk is permitted in vehicles/wagons covered with a sheet, containers covered with a sheet or bulk containers covered with a sheet;
- carriage in bulk is allowed in closed vehicles/wagons, closed containers or containers for closed bulk transport;
- if the vehicle/wagon or container is made of wood or other combustible material, an impermeable surfacing resistant to combustion or a coating of sodium silicate or similar substance shall be provided; sheeting also be impermeable and non-combustible;
- carriage in bulk shall only be as a full load.

ZAKsan® is a hazardous good, class 5.1, packing group III, according to RID and ADR transport provisions. Pursuant to the ADR provisions - vehicles - orange warning plates on the front and back of the vehicle/RID cars - orange warning plates on both sidewalls of the car.

Note

ZAKsan® should be provided to end user only in packed form.

9. Other information

ZAKsan® is granulated mechanically.

ZAKsan® has a certificate of *kashrut*.

10. Related documents

ZAKsan® Product sheet - Part II Safety Data Sheet

PN-EN ISO 780:2016-03 Packaging Distribution packaging Graphical symbols for handling and storage of packages

11. Replaces

ZAKsan® Specification PZ-041-01-01.5