

## 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) UN proper shipping name
- in Polish - Nawóz na bazie azotanu amonu
  - in English - Ammonium nitrate based fertilizer
  - in German - Ammoniumnitrathaltige düngemittel
- 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
- g) UFI code: P410-H0SH-7009-E5GQ

## 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

| Pos. | Parameter  | Value* | Unit    | Test method  |
|------|--|--------|---------|--|
| 1.   | total nitrogen (N)   | 32.0   | % (m/m) | In-house method of Grupa Azoty ZAK S.A based on PN-EN 15476:2009 |
| 2.   | ammoniacal nitrogen  | 16.0   | % (m/m) | In-house method of Grupa Azoty ZAK S.A based on PN-EN 15475:2009 |
| 3.   | nitrate nitrogen   | 16.0   | % (m/m) | In-house method of Grupa Azoty ZAK S.A based on PN-EN:15604:2012 |
| 4.   | loss on drying not more than   | 0.5    | % (m/m) | PN-C-87054:2000  |
| 5.   | Granules. 95% of the product is in the form of granules with dimensions of 2.0 - 5.0 mm. |        |         | PN-EN 1235:1999/A1:2004  |

\*Permissible tolerances for the declared contents of macronutrients and other declared parameters are included in Annex III, Part III of Regulation (EU) 2019/1009 and in Commission Delegated Regulation (EU) 2021/1768 of June 23, 2021, as amended.

## 3. Intended use

ZAKsan® is used as a fertiliser.

## 4. Shelf life/Durability

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

A quality certificate is issued each time at the customer's request.

## 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. The labelling contains at least the following data in accordance with the requirements of Regulation 2019/1009 (as amended), Regulation (EC) 1272/2008 (as amended), RID/ADR regulations:

|   |   |
|---|---|
| a) CE marking with the number of Notified Body  |   |
| b) product function category (PFC) of the EU fertilizer   | PFC 1(C)(I)(a)(i)(A): Straight solid inorganic macronutrient ammonium nitrate fertiliser of high nitrogen content   |
| c) declared component functions of the EU fertilizer  | N32<br>32% TOTAL NITROGEN (N)<br>16% ammoniacal nitrogen<br>16% nitric nitrogen   |
| d) components above 5% by weight of the product with the assigned component material category (CMC)   | CMC 1 - Ammonium nitrate (CAS 6484-52-2)<br>CMC 1 - Dolomite flour  |
| e) granulometry   | Granulometry: Granules. 95% of the product is in the form of granules with dimensions of 2.0 - 5.0 mm.  |
| f) net weight   | Net weight: ..... kg  |
| g) date of manufacture or other element allowing identification   |   |
| h) name and address of the manufacturer   |   |
| i) trade name of the fertilizer according to p.1.a  | ZAKsan®   |
| j) application information  |   |
| k) recommended storage conditions (handling marks according to PN-EN ISO 780:2016: mark No. 10, No. 11, No. 14, No. 16)                         | <p>For 50 kg packages:</p>  <p>For 500 - 1000 kg packages:</p>    |
| l) all relevant information on risks to human, animal and environmental health and life, as well as measures recommended to reduce these risks: | <p>Signal word: Warning</p> <p>Hazard statements: H272 May intensify fire; oxidiser.<br/>H319 Causes serious eye irritation.</p> <p>Precautionary statements: P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.<br/>P220 Keep away from clothing and other combustible materials.<br/>P264 Wash hands thoroughly after handling.<br/>P280 Wear eye protection.<br/>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.<br/>P337+P313 If eye irritation persists: Get medical advice/ attention.</p> |

|   |   |
|---|---|
| Pictograms indicating the type of hazard: |   |
|   |   |
| m) UN number or ID number                 | UN 2067   |
| n) UFI code                               | UFI: P410-H0SH-7009-E5GQ  |

In case of fertiliser exported outside the UE, 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 flexible containers (big-bags) up to 500 kg should be stored in two layers, while above 500 kg in a single layer. 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

- ZAKsan® should not be stored in bulk.

Storage site for fertiliser in unit packaging should be labelled with a plate containing the fertiliser name and manufacturing date.

## 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).

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® must be provided to end user only in packed form.

## 9. Other information

ZAKsan® is granulated mechanically.

ZAKsan® is kosher certified.

The product is made under a management system in accordance with ISO 45001:2018, ISO 50001:2018, ISO 14001:2015, ISO 9001:2015 .

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Grupa Azoty ZAK S.A. fertilizer products have been included in the Product Stewardship program of the Fertilizers Europe organization.

Replaces ZAKsan<sup>®</sup> Specification PZ-041-01-2.0