



NPK FERTILISER

NPK is a complex mineral fertiliser that supplies the three primary macronutrients in one granule: nitrogen for protein formation and fruit set, phosphorus for development during ripening, and potassium for plant metabolism, pathogen resistance and root development. It is supplied as free-flowing anti-caking treated granules in balanced grades such as 15-15-15 and 16-16-16, and is suitable for any soil type and all agricultural crops.

APPLICATIONS

Basic, pre-sowing and top-dress fertilisation of cereals, oilseeds, row crops, vegetables and orchards, where one granule supplies a balanced nitrogen, phosphorus and potassium ratio.	Yield and quality programmes where potassium raises oil content in kernels and improves storability of the harvest and crop resistance to adverse conditions during ripening and harvesting.
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COMPLEX MINERAL FERTILISER · NPK 15-15-15 · NPK 16-16-16

Specification:

IDENTITY, PHYSICAL AND CHEMICAL CHARACTERISTICS

ITEM OF TEST	TEST RESULTS	METHOD / REFERENCE
NUTRIENT GRADE, $N - P_2O_5 - K_2O$	NPK 15-15-15 and 16-16-16 (1:1:1); further ratios as agreed per order	Producer specifications (EC fertiliser)
APPEARANCE	Free-flowing granules, greyish-pink to light brown or white-grey, free from foreign matter	Visual; granulometry per EN 1235
TOTAL NITROGEN (N)	$15 \pm 1 \%$ (15-15-15); $16 \pm 2 \%$ (16-16-16)	BB Chemicals specification; EN 15476 or EN 15750
AMMONIACAL NITROGEN ($N-NH_4$)	$8 \pm 1 \%$ (15-15-15); min. 8.0 % (16-16-16)	EN 15475; FCO 1985, Schedule I
TOTAL PHOSPHORUS PENTOXIDE (P_2O_5)	$15 \pm 1 \%$ (15-15-15); $16 \pm 2 \%$ (16-16-16)	BB Chemicals specification; Extraction EN 15956; determination EN 15959
P_2O_5 SOLUBLE IN NEUTRAL AMMONIUM CITRATE AND WATER (AVAILABLE), min.	15.0 % (15-15-15); 16.0 % (16-16-16)	Extraction EN 15957; determination EN 15959
WATER-SOLUBLE P_2O_5 , min.	9.0 % (EC fertiliser 15-15-15); min. 85 % of the citrate-soluble content	Extraction EN 15958; determination EN 15959; FAO fertilizer specification, NPK complex
WATER-SOLUBLE POTASSIUM OXIDE (K_2O)	$15 \pm 1 \%$ (15-15-15); $16 \pm 2 \%$ (16-16-16)	BB Chemicals specification; EN 15477
TOTAL SULPHUR (SO_3 / S)	As agreed per order; grade NPK 15-15-15 + 9S declares min. 9.0 % S	Extraction EN 15960; determination EN 15749; FCO 1985, Schedule I
MOISTURE (WATER CONTENT), max.	1.0 % (1.5 % under FAO and FCO specifications)	BB Chemicals specification; EN 13466-1
GRANULOMETRY, fraction distribution	Below 1 mm max. 3 %; 1 – 5 mm min. 90 %; below 6.3 mm 100 %; average granule size 3.0 ± 0.3 mm	BB Chemicals specification; EN 1235
BULK DENSITY	$1.0 - 1.2 \text{ g/cm}^3$ ($950 - 1,150 \text{ kg/m}^3$)	Producer technical data sheet NPK 16-16-16; producer safety data sheet, NP/NK/NPK types
pH, aqueous solution 100 g/l, min.	4.5	Producer safety data sheet, NP/NK/NPK types
ANTI-CAKING AND ANTI-DUST TREATMENT	Granules treated with an anti-caking agent; conditioning agent as agreed per order	Producer specifications (EC fertiliser)

Nutrient and physical values are the specifications of NPK grades traded as EC fertilising products, cross-checked against the FAO fertilizer specification for NPK complex and the Fertiliser (Control) Order 1985, Schedule I. Methods are the CEN methods listed for inorganic macronutrient fertilisers under Regulation (EU) 2019/1009. Grade and tolerances are confirmed per order.

CONTAMINANT AND IMPURITY LIMITS

ITEM OF TEST	TEST RESULTS	METHOD / REFERENCE
CADMIUM (Cd) , max.	60 mg/kg P ₂ O ₅ for grades with total P ≥ 5 % P ₂ O ₅ -equivalent; 3 mg/kg dry matter below 5 %	Reg. (EU) 2019/1009, Annex I, Part II, PFC 1(C)(I), point 2(a); EN 16319 (ICP-AES, aqua regia)
HEXAVALENT CHROMIUM (Cr VI) , max.	2 mg/kg dry matter	Reg. (EU) 2019/1009, Annex I, Part II, PFC 1(C)(I), point 2(b); EN 16318 (photometry / ion chromatography)
MERCURY (Hg) , max.	1 mg/kg dry matter	Reg. (EU) 2019/1009, Annex I, Part II, PFC 1(C)(I), point 2(c); EN 16320 (vapour generation, aqua regia)
NICKEL (Ni) , max.	100 mg/kg dry matter	Reg. (EU) 2019/1009, Annex I, Part II, PFC 1(C)(I), point 2(d); EN 16319 (ICP-AES, aqua regia)
LEAD (Pb) , max.	120 mg/kg dry matter	Reg. (EU) 2019/1009, Annex I, Part II, PFC 1(C)(I), point 2(e); EN 16319 (ICP-AES, aqua regia)
ARSENIC (As) , max.	40 mg/kg dry matter	Reg. (EU) 2019/1009, Annex I, Part II, PFC 1(C)(I), point 2(f); EN 16317 (ICP-AES, aqua regia)
BIURET (C₂H₅N₃O₂) , max.	12 g/kg dry matter	Reg. (EU) 2019/1009, Annex I, Part II, PFC 1(C)(I), point 2(g); EN 15479 or ISO 18643
PERCHLORATE (ClO₄⁻) , max.	50 mg/kg dry matter	Reg. (EU) 2019/1009, Annex I, Part II, PFC 1(C)(I), point 2(h); EN 17246 (ion chromatography)
COPPER (Cu) , max.	600 mg/kg dry matter (does not apply where copper is intentionally added and declared)	Reg. (EU) 2019/1009, Annex I, Part II, PFC 1(C)(I), point 3; CEN/TS 17754
ZINC (Zn) , max.	1,500 mg/kg dry matter (does not apply where zinc is intentionally added and declared)	Reg. (EU) 2019/1009, Annex I, Part II, PFC 1(C)(I), point 3; CEN/TS 17754

All contaminant limits are the statutory maxima for inorganic macronutrient fertilisers laid down in Regulation (EU) 2019/1009, Annex I, Part II, PFC 1(C)(I), points 2 and 3. For the balanced grades 15-15-15 and 16-16-16 the phosphorus content is above 5 % phosphorus pentoxide-equivalent, so the applicable cadmium limit is 60 mg/kg P₂O₅. Batch results are reported in the certificate of analysis.

Product: complex mineral fertiliser containing nitrogen, phosphorus and potassium (NPK)

CN / HS code: 3105 20 (fertilisers containing the three fertilising elements nitrogen, phosphorus and potassium)

EU product function category: PFC 1(C)(I)(a)(ii), compound solid inorganic macronutrient fertiliser

Traded grades: NPK 15-15-15; NPK 16-16-16; further ratios as agreed per order

Appearance: free-flowing granules, fraction 1 – 5 mm, anti-caking treated

Applications: basic, pre-sowing and top-dress fertilisation of all agricultural crops on any soil type, including cereals, oilseeds, row crops, vegetables and orchards

Packaging: polypropylene bags 50 kg and 25 kg net; big bags 500 kg net; other packaging by agreement

Storage & transport: dry, covered, well-ventilated premises in intact packaging, protected from moisture, precipitation and direct sunlight

Shelf life: as agreed per order; the product is not perishable, but caking may occur on prolonged storage or under high humidity

COMPLIANCE & DOCUMENTATION

- The product is placed on the Union market as an EU fertilising product of product function category PFC 1(C)(I)(a)(ii) under Regulation (EU) 2019/1009; the EU declaration of conformity and CE marking documentation of the producing plant are available on request.
- The cadmium content complies with the limit of 60 mg/kg phosphorus pentoxide (P₂O₅) for phosphate fertilisers set out in Annex I, Part II, PFC 1(C)(I), point 2(a) of Regulation (EU) 2019/1009.
- The product is a mixture of substances registered under Regulation (EC) No 1907/2006 (REACH), such as ammonium nitrate, ammonium sulphate, ammonium phosphates and potassium sulphate; the component registration numbers are stated in the safety data sheet of the delivered grade.
- NP, NK and NPK grades with an ammonium nitrate content below 70 % that satisfy the criteria of UN special provision 193 are not classified under Regulation (EC) No 1272/2008 (CLP) and are not dangerous goods under ADR, RID, IMDG and ICAO/IATA according to the producer safety data sheet; the classification of each delivered grade is confirmed in its own safety data sheet.
- Where the nitrogen content derived from ammonium nitrate exceeds 16 % by mass, acquisition, possession and use by the general public are restricted, and the packaging carries the corresponding statement.
- Each consignment is accompanied by a certificate of analysis with batch-specific results; third-party contaminant test reports and plant management-system certificates are available on request.

References: Regulation (EU) 2019/1009, consolidated text, Annex I, Part II, PFC 1(C)(I), eur-lex.europa.eu; Standardisation request M/564 for fertilising products (CEN methods per parameter), fertilizer-certification.eu; Product specification NPK 15-15-15, CE fertilising product, Petrokemija, petrokemija.hr.

This specification is issued for information purposes and does not constitute a warranty. Batch-specific values are confirmed in the certificate of analysis accompanying each consignment.