Basekim
Chemical Production Co.Ltd

MATERIAL SAFETY DATA SHEET

NPK Compound Fertilizer — Granular

Version: 1.0
Issue date: 14 July 2026
Product form: Granules or crystals
Recommended grade: General-purpose NPK compound fertilizer

Important: Basekim supplies multiple NPK ratios, including granular, crystalline, water-soluble, slow-release and customized formulations. This SDS is a general template for a conventional, non-hazardous NPK compound fertilizer. Nitrate-rich, coated or micronutrient-containing grades may require different hazard and transport classifications.

1. Identification

Product name: NPK Compound Fertilizer
Alternative names: NPK fertilizer; compound fertilizer; mixed fertilizer

Recommended use: Agricultural fertilizer supplying nitrogen, phosphorus and potassium for crop nutrition.

Supplier: Basekim Chemical Production Co. Ltd.
Ankara telephone: +90 312 514 70 55
Istanbul telephone: +90 212 807 22 33
Dubai telephone: +971 4 236 98 30
Email: info@basekim.com
Website: basekim.com

Emergency telephone: Insert the supplier's continuously monitored emergency number.

Basekim offers standard and customized NPK ratios for different crops, soils and growth stages.

2. Hazard Identification

GHS Classification

The product is **not normally classified as hazardous** when supplied as a conventional granular NPK fertilizer and used as directed.

Signal word: None
Hazard pictograms: None
Hazard statements: None required

Other Hazards

- Fertilizer dust may irritate the eyes, skin and respiratory tract.
- Ingestion of large quantities may cause gastrointestinal discomfort.
- Spilled granules may create a slipping hazard.
- Heating or fire may release irritating or toxic decomposition gases.
- Some nitrate-containing grades may support combustion and require separate oxidizer assessment.
- Excessive environmental release may contribute to nutrient enrichment of surface water.

Precautionary Statements

- Avoid breathing dust.
- Wear gloves and safety glasses during handling.
- Wash thoroughly after use.
- Keep away from heat, combustible materials and incompatible chemicals.
- Prevent uncontrolled release into waterways.

3. Composition/Information on Ingredients

Typical composition varies according to the declared NPK grade.

Component	Typical Concentration
Nitrogen-containing compounds	5–35%
Phosphate-containing compounds	5–55%
Potassium salts	5–50%
Fillers, conditioners and trace elements	Balance

Examples supplied by Basekim include NPK 15-15-15, 20-20-20, 30-10-10, 10-52-10 and 12-12-36, as well as customized formulas.

The exact composition, CAS numbers and nutrient sources must be stated on the grade-specific SDS and Certificate of Analysis.

4. First-Aid Measures

Inhalation: Move the person to fresh air. Rinse the nose and mouth with water. Obtain medical advice if coughing or irritation continues.

Skin contact: Remove contaminated clothing. Wash affected skin thoroughly with soap and water.

Eye contact: Rinse cautiously with clean water for at least 15 minutes. Remove contact lenses when easy to do. Seek medical attention if irritation persists.

Ingestion: Rinse the mouth. Give water to drink if the person is conscious. Do not induce vomiting. Obtain medical advice if a large quantity is swallowed or symptoms develop.

Most common symptoms: Eye irritation, coughing, throat discomfort, nausea or abdominal discomfort.

5. Firefighting Measures

The product is generally not combustible; however, some nitrogen-containing components may support combustion.

Suitable extinguishing media:

- Water spray or flooding quantities of water
- Extinguishing media appropriate for the surrounding fire

Do not use chemical extinguishing methods that are incompatible with oxidizing fertilizer grades.

Heating may produce:

- Ammonia
- Nitrogen oxides
- Phosphorus oxides

- Sulfur oxides, where sulfur compounds are present
- Hydrogen chloride, where chloride salts are present

Firefighters should wear full protective clothing and self-contained breathing apparatus.

Cool exposed bags or containers with water spray. Prevent contaminated firefighting water from entering waterways.

6. Accidental Release Measures

- Avoid generating dust.
- Wear gloves, safety glasses and suitable respiratory protection where dust is present.
- Sweep, shovel or vacuum spilled material into clean, labelled containers.
- Keep spilled material separate from fuels, oils, sawdust and other combustible materials.
- Do not return contaminated fertilizer to the original packaging.
- Prevent entry into drains, groundwater and surface water.
- Clean the affected area after recovery.

Uncontaminated material may be reused where permitted and suitable for its intended agricultural application.

7. Handling and Storage

Handling

- Avoid breathing dust and contact with eyes.
- Use adequate workplace ventilation.
- Do not eat, drink or smoke while handling.
- Wash hands after use.
- Keep the product away from fuels, lubricants and combustible materials.
- Prevent contamination with incompatible chemicals.

Storage

- Store in a cool, dry and ventilated warehouse.
- Keep bags tightly closed and protected from moisture.
- Protect from direct sunlight and excessive heat.
- Store away from strong acids, alkalis, reducing agents and combustible materials.
- Do not store near food or animal feed.
- Keep stacks stable and maintain clear access routes.

Basekim lists 25 kg, 50 kg and 1-metric-ton bags for NPK fertilizers.

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8. Exposure Controls/Personal Protection

Engineering controls: Provide general ventilation and local dust extraction around filling, mixing and transfer points.

Eye protection: Safety glasses with side shields or chemical goggles.

Hand protection: Protective gloves, such as nitrile, PVC or rubber.

Respiratory protection: Use an approved particulate respirator where dust cannot be adequately controlled.

Body protection: Long-sleeved work clothing and protective footwear.

Hygiene: Wash hands and exposed skin after handling. Launder contaminated clothing before reuse.

9. Physical and Chemical Properties

Property	Typical Information
Physical state	Solid
Appearance	Granules, crystals or powder
Colour	Grade dependent
Odour	Odourless to mild characteristic odour
pH	Approximately 4–8, grade dependent
Bulk density	Approximately 0.9–1.2 g/cm³
Solubility in water	Partial to complete, depending on grade
Melting/decomposition point	Decomposes on heating
Flash point	Not applicable
Flammability	Generally non-combustible
Explosive properties	Not normally explosive; contamination or confinement during heating may increase risk
Oxidizing properties	Grade and composition dependent

Basekim markets granular, water-soluble, crystalline and coated slow-release NPK products, so physical properties must be confirmed for the selected grade.

10. Stability and Reactivity

Stable under recommended storage conditions.

Conditions to avoid:

- Excessive heat
- Fire
- Moisture and water contamination during storage
- Confinement while strongly heated
- Contamination with incompatible materials

Incompatible materials:

- Strong acids and alkalis
- Strong reducing agents
- Fuels, oils and other combustible materials
- Metal powders
- Chlorates and hypochlorites
- Reactive agricultural chemicals

Hazardous polymerization will not occur.

Thermal decomposition may produce ammonia, nitrogen oxides and other irritating gases depending on formulation.

11. Toxicological Information

Acute toxicity: Low acute toxicity is expected under normal conditions of use.

Inhalation: Dust may irritate the nose, throat and lungs.

Skin contact: Prolonged contact may cause mild irritation or dryness.

Eye contact: Dust or granules may cause mechanical irritation, redness and watering.

Ingestion: Large quantities may cause nausea, vomiting, abdominal discomfort or electrolyte imbalance.

Sensitization: Not expected for standard formulations.

Carcinogenicity, mutagenicity and reproductive toxicity: Not expected to be classified based on conventional fertilizer ingredients. The exact micronutrient and additive package must be assessed separately.

12. Ecological Information

The product supplies plant nutrients and is intended for controlled agricultural application.

Large or uncontrolled releases may:

- Increase nitrogen and phosphorus levels in water
- Promote excessive algae or plant growth
- Reduce water quality
- Affect aquatic ecosystems

Avoid direct discharge into drains, lakes, rivers or groundwater.

The product is expected to be water-soluble or dispersible and may move through soil, depending on its formulation and environmental conditions.

13. Disposal Considerations

Use uncontaminated product according to agricultural recommendations where legally permitted.

Dispose of contaminated product through an authorized waste contractor.

Do not dispose of large quantities into drains, waterways or general household waste.

Empty packaging thoroughly. Recycle or dispose of packaging according to local regulations. Do not reuse fertilizer packaging for food, water or animal feed.

14. Transport Information

For conventional, non-oxidizing NPK compound fertilizer:

Item	Classification
UN number	Not assigned

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Item	Classification
ADR/RID	Not regulated
IMDG	Not regulated
IATA/ICAO	Not regulated
Packing group	Not applicable
Marine pollutant	No

Warning: Fertilizers containing sufficiently high levels of ammonium nitrate or other oxidizing substances may be regulated as dangerous goods. The exact formula must be evaluated before transport.

Keep packages dry, closed and protected from contamination and physical damage.

15. Regulatory Information

The product must comply with fertilizer, chemical, environmental and labelling regulations applicable in the destination country.

The responsible supplier or importer must confirm:

- Exact NPK ratio and nutrient sources
- Ammonium-nitrate concentration
- GHS classification
- Heavy-metal and contaminant limits
- Micronutrient declarations
- Fertilizer registration
- Transport status
- Country-specific labelling requirements

16. Other Information

This SDS is intended for a typical granular or crystalline NPK compound fertilizer. It does not automatically cover:

- Ammonium-nitrate-rich fertilizer
- Liquid fertilizer
- Pesticide-fertilizer combinations

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- Coated controlled-release fertilizer
- Products containing hazardous micronutrients
- Customized blends with different classifications

Basekim's webpage covers several NPK types and custom formulas; therefore, the final issued SDS must identify the exact grade, such as **NPK 15-15-15** or **NPK 20-20-20**, and use its actual ingredient composition.

Supplier: Basekim Chemical Production Co. Ltd.