

Date: 16th August 2023

MATERIAL SAFETY DATA SHEET

COMPLEX MINERAL NP FERTILIZERS

Conforms to EC N°. 1907/2006 (REACH)

Amended by the new regulation (EO) 2020/878 committee of 18th June 2020

Revision/January 2023

1. IDENTIFICATION OF THE SUBSTANCE AND THE COMPANY

1.1. Identification of the substance/preparation

- Product names: NP FERTILIZERS: NP 8-26. (Preparation)
- Synonyms: EC Fertilizers.

1.2. Use of the substance/preparation

- Identified uses: Fertilizer in agriculture.
- Uses specification: Fertilizer, nutrition for various kinds of agricultural plants.

1.3. Company identification

Manufacture : **GRANUPHOS INDUSTRIE S.A**

6, Port avenue PB 142, 3018 Sfax, Tunisia.

Tel : (+216) 74 210 542, **Fax :** (+216) 74 298 474

E-mail : contact@granuphos.com.tn

1.4. Emergency phones: (+216) 198

2. HAZARD IDENTIFICATION

2.1. Classification of the substance/preparation

Product is not classified as hazardous material.

2.2. Information pertaining to particular dangers for human:

Inhalation: High dusting may cause irritation of the nose and upper respiratory tract with symptoms of sore throat and cough.

Skin and Eyes contact: Prolonged contact may cause some irritation.

2.3. Emergency review

When heated it decomposes releasing vapors which contain ammonia. In contact with strong alkalis gaseous ammonia can be released.

3. COMPOSITION / INFORMATION ON INGREDIENTS

The product is a mixture of a mineral material with some substances.

Ingredient name	Cas Number	EINECS	Reach Registration N°	%
RockPhosphate	14265-44-2	--	-----	56
Ammonium Sulfate	7783-20-2	231-984-1	01-2119455044-46-0020	20
Di-ammonium phosphate	7783-28-0	231-987-8	01-2119490974-22-0035	22
Water	7732-18-5	--	-----	2

4. FIRST AID MEASURES

- First aid measures: Medical aid may be needed.
- Inhalation: Remove from source of dust exposure to fresh air. Keep warm and resting, even without symptoms.
- Skin contact: Wash the affected parts with plenty of water.
- Eye contact: Irrigate eyes with copious amounts of water for 10 - 15 minutes. Open eyelids with clean fingers and roll the eyes letting the water into all parts of the eye. Seek medical attention if symptoms persist.

5. FIRE-FIGHTING MEASURES

NP fertilizers without ammonium nitrate it's not self igniting and usually do not burn.

- Extinguishing media: Suitable: water.
Do not use: Chemical extinguishers, sand or steam.

6. ACCIDENTAL RELEASE MEASURES

- Personal precautions: Wear protective clothing and boots. If dusting, use a protective mask and dust goggles. In presence of decomposition gases use gas mask.
- Methods for cleaning up/collecting: Sweep up the spilled product and place it in PVC bags or containers, may be used for fertilizer.

7. HANDLING AND STORAGE

7.1. Handling

Prevent dusting, any possible source of ignition. Use protective gloves for handling

7.2. Storage

NP fertilizers can be stored only in storage with a roof, packed in original packages or bulk. It must be protected from direct influence of floor moisture, precipitation, the sun, or source of heat.

8. EXPOSURE CONTROL/ PERSONAL PROTECTION

8.1. Exposure limit values

Although there is no state official limit, according to ACGIH 2003 recommended maximal allowable concentration value is 10 mg/m³ for total inhalable particulate (total inhalable dust) in work environment.

8.2. Exposure controls

Prevent high concentrations of dust and provide ventilation.

8.2.1. Occupational exposure control:

General safety measures: Washing hands after work and before meals.

- Personal protection measures:
 - Respiratory organs protection: Wear respiratory mask (against dust) or filtering gas masks KD or A1.B1.E1.K1. (Decomposition gases).
 - Hand protection: Protective butyl rubber gloves.
 - Eye protection: Use dust goggles if high dust concentration is generated.
 - Skin protection: Standard work clothing and boots.

- Special hygiene measures: Do not eat and drink while handling the product.

8.2.2. Environmental protection control

- Summary of risk management measures: There is no risk for environment when used appropriately and in adequate quantity per area unit.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. General information

- State of matter: solid
- Form: granules
- Colour: grey
- Odour: odourless

9.2. Information concerning health, safety and environment

- | | | |
|---------------------------------|-------------------|----------------------------|
| - pH (20% water solution, 20°C) | | 7 – 7.5 |
| - Melting point | °C | ~ 200 |
| - Decomposition temperature | °C | > 250 |
| - Explosive limits | vol% | not explosive |
| - Bulk density | kg/m ³ | 1100-1200 |
| - Solubility (water, 20 °C) | g/l | Partially soluble |
| - Moisture absorption | | Fertilizer is hygroscopic. |

10. STABILITY AND REACTIVITY

The product is stable under normal conditions of storage, handling and use.

- Conditions to avoid: Storing near a heat source.
- Materials to avoid: In contact with strong alkalis gaseous ammonia can be released.
- Hazardous decomposition products: vapors which contain ammonia.

11. TOXICOLOGICAL INFORMATION

Fertilizers generally have low toxicity: LD50 (rat, oral) > 2000 mg/kg. Source: EFMA.

- Acute toxicity:
Ammonium sulphate LD50 (rat, oral) > 2840 mg/kg
Di-ammonium phosphate LD50 (rat, oral) > 6500 mg/kg
- Irritation/erosion:
Skin: Dust may cause irritation.
Eyes: Dust may cause irritation of eyes.
Respiratory tract: Decomposition products can cause lung oedema.
- Special effects:
Fertility reduction: None.
Detrimental effect on embryo: None.

12. ECOLOGICAL INFORMATION

12.1. Ecotoxicity

Low toxicity for aquatic organisms.

- **12.2. Mobility:** Ammonia (NH₄⁺) ions are adsorbed to soil particles. Phosphorus, water- and citrate-soluble, enters shortly into soil solution, but is soon bound to soil components and becomes immobile.

12.3. Persistence and degradability:

- Bio-degradability: Nitrogen is bio-degradable, as it follows the natural nitrogen nitrification/gentrification cycle, which is the basis of plant nutrition. Phosphorus goes into poorly soluble calcium or iron/aluminum phosphates or is integrated into inorganic substances of the soil.

12.4. Bio accumulative potential: not bio-accumulative.

13. DISPOSAL CONSIDERATIONS

- Waste disposal methods

Product remains: Depending on the degree and nature of contamination, the waste can be used as fertilizer or, after conditioning, disposed of at a technological waste disposal site.

Used packages are recycled.

- Legal waste disposal provisions

Regulations on packages and packaging waste. Regulation on conditions of packages labeling.

14. TRANSPORT INFORMATION

- Transport classification designations

NP fertilizers are not classified as it is not regarded as hazardous material or cargo in view of the UN regulations on transport of hazardous substances and regulations of international road (ADR), railway (RID) and maritime (IMGD) transport.

15. REGULATORY INFORMATION

- Applicable regulations:

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006.

Act on Chemicals and supporting regulations.

Directive EU/1272/2008(CLP).

Regulation (EC) No 2003/2003.

16. OTHER INFORMATION

The data given here is based on current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety precautions. However, it shall not constitute or imply a guarantee concerning composition, properties, or performance, and shall not establish a legally valid contractual relationship.