

MATERIAL SAFETY DATA SHEET

Rev. Date:29.07.2024

1. IDENTIFICATION OF THE COMPANY AND PRODCUT

Product Name: **FORTIS FERT NITRO 30-5-10 + ME**
Manufacturer: **LENA TARIM CO.**

2. COMPOSITION/INFORMATION ON INGREDIENTS

PARAMETER	SOURCE	CONCENTRATION
Total Nitrogen (N)		30 %
Urea Nitrogen (N)	UREA	22,5 %
Ammonia Nitrogen (N)	MAP	4,5 %
Nitrate Nitrogen (N)	MAP	3,0 %
Water Soluble (P ₂ O ₅)	MAP	5,0 %
Phosphorus soluble in water and neutral ammonium citrate (P ₂ O ₅)	MAP	5,0 %
Water Soluble (K ₂ O)	Potassium Nitrat	10,0 %
Water Soluble Iron (Fe)	Zn-EDTA	0,035 %
Water Soluble Zinc (Zn)	Fe-EDTA	0,025 %
Water Soluble Manganese (Mn)	Mn-EDTA	0,020 %
Water Soluble Boron (B)	Boric Acid	0,015 %

3. HAZARDS IDENTIFICATION

- None. This product does not require labeling.

4. PHYSICAL DATA

- Skin:** Promptly wash areas in contact with concentrate; if any irritation is prolonged seek medical attention.
- Eyes:** In case of contact with the eyes, rinse (flush) immediately with plenty of water and continue for at least 15 minutes; if irritation continues or if in doubt seek medical advice.
- Ingestion:** If ingested, do not make casualty vomit; wash out mouth with water, give large quantities of water to drink immediately; if symptoms persist seek medical attention, particularly if more than small quantities swallowed.

5. FIRE FIGHTING MEASURES

- Not flammable.
- In event of fire caused by another cause, containers could melt releasing preparation solution which could release low levels of formaldehyde vapours; fire fighters ought be informed, but it is not expected to generate a significant hazard.

6. ACCIDENTAL RELEASE MEASURES

- Prevent entry into drains and watercourses (see 12)
- Following spillage inside (shed/store), open doors and windows to give ventilation.

7. HANDLING AND STORAGE

- Do not eat;
- Keep locked up and out of the reach of children;
- Avoid contact with the skin;
- Use concentrate only in well-ventilated areas;
- Avoid contact with the eyes;
- Avoid misting during application;
- Follow manufacturers guidance in dilution/application rates.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- When handling concentrate wear suitable gloves and eye protection

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	White to yellowish white Colored Powder
pH	4,00 ± 1 (at 20 ⁰ C)
Solubility	100 % Water Soluble

10. STABILITY AND REACTIVITY

- Stable under ambient conditions
- Non-combustible
- Cartons or plastic containers may be destroyed by fire, combusting to release toxic fumes.

11. TOXICOLOGICAL INFORMATION

- The preparation is not classified as hazardous as stated under Chemical Hazard Information.
- May have allergic reactions on pre-sensitised skin.

12 ECOLOGICAL INFORMATION

- Low toxicity to aquatic life
- Prevent entry to the drains
- If spillage occurs do not contaminate surface waters or ditches.

13. DISPOSAL CONSIDERATIONS

- Return or dispose of container in an appropriate manner, in accordance with local regulations
- Container recyclable (polyethylene).

14. TRANSPORT INFORMATION

- UN Number: Not hazardous for transport. Does not apply
- Packing: N/A
- Hazard Class: N/A

15. REGULATORY INFORMATION

- The preparation is not classified as hazardous according to EC Directive 88/379/EEC, and UK implementation regulations under Chemical Hazard Information and Packaging for supply Regulations 1994 (CHIP2) and CHIP3.

16. OTHER INFORMATION

- The data given in this sheet are provided in good faith and is based on current knowledge and experience: however, no liability is accepted for any insufficiency or omission in any case whatsoever.
- This data sheet does not constitute an assessment of workplace control as required by current legislation.

Tarım Ürünleri

29.07.2024

FERTILIZER PRODUCTION FLOWCHART

FORTIS FERT NITRO 30-5-10 + ME

- 1. Raw Material Analysis**
 - Conduct initial quality control of raw materials to ensure they meet the required specifications.
- 2. Formulation Preparation**
 - Prepare the formulation using an automatic dosing machine to mix raw materials in precise proportions.
 - Raw materials used: UREA, MAP, Potassium Nitrat, Zn-EDTA, Fe-EDTA, Mn-EDTA, Boric Acid
- 3. In-Process Quality Control**
 - Perform quality control checks during the formulation process to ensure consistency and accuracy.
- 4. Final Quality Control**
 - Conduct final quality control checks on the mixed formulation to verify that it meets the product standards and specifications.
- 5. Packaging**
 - Fill the prepared fertilizer into 25 kg or 2 kg bags using an automatic filling machine.
- 6. Final Inspection**
 - Perform a final inspection of the filled bags to ensure proper sealing, labeling, and overall quality before distribution.

ANALYSIS CERTIFICATE

PRODUCT NAME	FORTIS FERT NITRO 30-5-10 + ME
PRODUCT DATE	29 / 07 / 2024
EXPIRY DATE	29 / 07 / 2026
BATCH NO	0005465
PRODUCT TYPE	NPK FERTILIZER

PHYSICAL CHARACTERISTIC

PARAMETER	SPECIFICATION	METHOD	RESULT
Appearance	Powder	Visual	Powder
Color	White to yellowish white	Visual	Yellowish white
PH	4,0 ± 1	10 % solution (w / w) (at 20 °C)	4,65
Solubility	100 % water soluble	-	Confirmed
Dilution	1 : 2 ml / 1 litre	-	Confirmed

CHEMICAL CHARACHTERISTIC

PARAMETER	CONCENTRATION	TYPE	METHOD / SOURCE	RESULT
Total Nitrogen (N)	30,0 %	w/w	ICP-AES	30,04
Urea Nitrogen (N)	22,5 %	w/w	ICP-AES	22,49
Ammonia Nitrogen (N)	4,5 %	w/w	ICP-AES	4,65
Nitrate Nitrogen (N)	3,0 %	w/w	ICP-AES	3,03
Water Soluble (P ₂ O ₅)	5,0 %	w/w	ICP-AES	5,12
Phosphorus soluble in water and neutral ammonium citrate (P ₂ O ₅)	5,0 %	w/w	ICP-AES	5,12
Water Soluble (K ₂ O)	10,0 %	w/w	ICP-AES	10,13
Water Soluble Iron (Fe)	0,035 %	w/w	ICP-AES	0,034
Water Soluble Zinc (Zn)	0,025 %	w/w	ICP-AES	0,027
Water Soluble Manganese (Mn)	0,020 %	w/w	ICP-AES	0,021
Water Soluble Boron (B)	0,015 %	w/w	ICP-AES	0,014