TECHNICAL DATA SHEET

Product Name: N-(n-Butyl) thiophosphoric triamide (NBPT)
CAS No.: 94317-64-3
EINECS No.: 620-500-7
EC Code: 015-203-00-X

1. Product Description

NBPT is a highly effective **urease inhibitor** used to reduce nitrogen loss from urea-based fertilizers. It enhances nitrogen use efficiency (NUE), reduces ammonia volatilization, and promotes sustainable agriculture.

2. Specifications

Parameter	Specification
Appearance	White to light yellow powder or liquid
Purity (HPLC)	≥ 97%
Melting Point (powder)	115 – 135°C
Solubility	Soluble in organic solvents; slightly soluble in water
pH (1% solution)	6.0 – 8.0
Density (liquid)	1.02 – 1.10 g/cm³
Moisture Content	≤ 1.0%
Packaging	25 kg drum / 200 kg drum / IBC tote

3. Recommended Use

NBPT is commonly **coated on urea granules** or **added to liquid fertilizers** (UAN) at a dosage of:

Urea coating: 0.05–0.20% w/w

UAN solutions: 0.05–0.10% w/w

Final dosage should be adjusted based on climate, soil conditions, and crop types.

4. Benefits

Reduces **ammonia volatilization losses** by 40–70%

Improves **nitrogen use efficiency (NUE)**

Extends **nitrogen availability** in soil

Compatible with **urea, UAN, and other nitrogen fertilizers**

Contributes to **environmentally responsible farming**

5. Storage & Handling

Store in a **cool, dry, and ventilated** area

Avoid exposure to direct sunlight or high temperatures

Shelf life: **24 months** under proper conditions

Use personal protective equipment (PPE) during handling

6. Applications

Agriculture (field crops, vegetables, orchards)

Horticulture

Turf and lawn fertilizers

Specialty fertilizers and slow-release systems

7. Safety & Regulatory

Not classified as hazardous under normal use

Complies with major agricultural regulatory frameworks

Safety Data Sheet (SDS) available on request

8. Package

25kg craft paper + PE bags