

TECHNICAL DATA SHEET

Chemical Name: Tris(2-butoxyethyl) phosphate (TBEP)
Molecular Formula: $C_{18}H_{39}O_7P$
Product appearance: colorless to yellowish transparent liquid
Cas No.: 78-51-3

Technical Index:

No.	Standards	Index
1	Content % \geq	99
2	Moisture (H ₂ O), % \leq	0.1
3	Acid value, mg (KOH)/g \leq	0.1
4	Density (25°C), g/ml	1.010~1.022
5	Refractive Index (n ₂₀ /D)	1.430~1.440

Applications & Features:

TBEP (Tributoxy ethyl phosphate) has multiple applications and plays a vital role in various industries. It is primarily used in surface coatings, particularly in floor care products such as polishes and finishes. It functions as a leveling agent in latex paints and waxes. Additionally, TBEP serves as a processing aid for acrylonitrile rubber and as an anti-block agent for cast polyurethanes.

TBEP can be used as a flame retardant for materials such as plastics, rubber, and synthetic fibers. It finds wide application in the fire protection and electronics industries.

Used in polyurethane rubber, cellulose, polyvinyl alcohol nitrocellulose, and acrylic plasticizers, it can provide products with transparency and excellent resistance to ultraviolet (UV) radiation, particularly in floor care formation, TBEP can effectively lower the glass transition temperature (T_g) of floor wax polymers, imparting elasticity to the coating. Simultaneously, it reduces the minimum temperature required for polymer film formation, enhancing constructability.

TBEP also acts as a leveling agent, facilitating the smooth flow of floor wax during the coating process. This feature is particularly crucial in multi-layer floor wax coatings, ensuring an even and uniform application. Therefore, TBEP is an effective ingredient in floor wax formulations.

Storage & Packages

TBEP should be sealed and stored in a cool, dry, and ventilated place, kept moisture-proof and waterproof, and far away from kindling material and heat sources. Galvanized drum, 200kg net each, 1000kg square IBC package.