Enke
—— CHEMICAL 恩科化工 ——

TECHNICAL DATA SHEET

Chemical Name: Dibutyl phosphate(DBP)
Molecular Formula: $C_8H_{19}O_4P$
Product appearance: Colorless transparent liquid
CAS No.: 107-66-4

● Technical Index：

No.	Standards	Index
1	Content % $\geq$	98
2	Moisture (H_2O), % $\leq$	0.3
3	Acid value, mg (KOH)/g $\leq$	300
4	Density (25℃), g/ml	1.055-1.061
5	Color APHA $\leq$	30

● Applications & Features:

Plasticizer: Dibutyl phosphate is commonly used as a plasticizer in the production of plastics and rubber products, enhancing their flexibility and stretchability. It improves the flowability and processability of materials during manufacturing, providing similar performance to TBEP.

Solvent: Dibutyl phosphate serves as an organic solvent and finds applications in various manufacturing processes, including the production of inks, adhesives, coatings, and cleaning agents.

Extractant: Dibutyl phosphate is utilized as an extractant for rare earth elements, particularly in the separation and purification of metals such as uranium and thorium. It effectively extracts uranium from ores and solutions, catering to the needs of the uranium mining and nuclear fuel production industries.

Flame retardant: Dibutyl phosphate acts as a flame retardant additive in plastics, coatings, and textiles. It helps to reduce flammability and improve the fire resistance properties of these materials.

● Storage

To ensure proper storage, Dibutyl phosphate should be kept in its original sealed container, with a recommended shelf life of at least 24 months. Suitable storage materials include stainless steel, glass, and plastics such as polyethylene and polytetrafluoroethylene (PTFE). It is important to avoid using containers made of ordinary steel, as they can react with Dibutyl phosphate, resulting in the production of hydrogen gas and posing a potential explosion hazard.