



Lankem 

Phosphate Ester Surfactants

High-Performance Solutions from Lankem



www.lankem.com

Expertise in Phosphate Ester Surfactants

At Lankem, we are a leading manufacturer of phosphate ester surfactants. To meet increasing demand, we've invested in advanced manufacturing and laboratory facilities. Our new production facilities ensure full process control and consistently high-quality products.

With decades of expertise in the chemical industry, Lankem has built a strong reputation for delivering innovative solutions tailored to our customers' needs. Our phosphate ester surfactants play a crucial role in a wide range of applications.

By continually upgrading our facilities, we remain committed to stringent quality standards and sustainable practices. Our dedicated research and development team works closely with customers to develop bespoke systems when required, ensuring optimal performance in every application. We pride ourselves on providing responsive customer service and ongoing support throughout the product lifecycle, thereby establishing long-term partnerships with businesses worldwide.

We offer two main types of phosphate esters:

P₂O₅ Based Surfactants	Tetraphosphoric Acid-Based
Balanced mono & diesters	Primarily monoester-based
Versatile, multifunctional performance	Enhanced solubility control
Used across wide applications	Simplifies formulation challenges

By adjusting mono/diester ratios, we help you optimize detergency, emulsification, wetting, and dispersing power.

Monoester vs Diester – Performance Characteristics

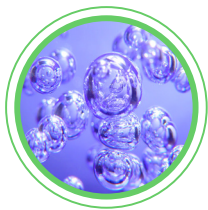
Property	Monoester	Diester	Ideal For
Hydrotropicity	Excellent	Poor	Hard surface cleaning
Electrolyte tolerance	Excellent	Poor	High-salt systems
Detergency	Fair	Good	Detergent formulations
Wetting	Fair	Excellent	Penetrating agents
Emulsification	Good (polymers)	Good (oils)	Agriculture, coatings
Foaming	High	Lower	Cleaning applications
Dispersing	Poor	Excellent	Pigment / soil suspension



Product Range

Product	Details
Phosphate Esters P2O5 type	
Lanphos PE244	Alcohol ether phosphate acid form
Lanphos PE35	Tridecanol + 5EO phosphate ester acid form
Lanphos PE36	Tridecanol + 6EO phosphate ester acid form
Lanphos PE310	Tridecanol + 10EO phosphate ester acid form
Lanphos PET11	Poly aryl ether phosphate - acid form
Lanphos PET22	Poly aryl ether phosphate - triethanolamine salt
Lanphos PE74	Cetyl oleyl ethoxy phosphate
Lanphos PS6-25A	C13 ethoxy phosphate ester ammonia salt
Lanphos PS10	C13 + 10EO phosphate ester potassium salt
Lanphos PE107	Phosphate ester for alkali cleaners
Phosphate Esters TPA type	
Lanphos TE43	C12-15 + 3EO phosphate ester - acid form
Lanphos TEP4	Phenol + 4EO phosphate ester - acid form
Lanphos TEP4K	Phenol + 4EO phosphate ester - potassium salt
Lanphos HT66	Effective Hydrotrope

Application Areas



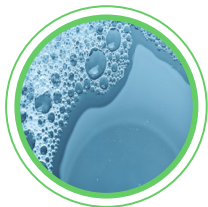
Emulsion Polymerisation

- Highly effective surfactants for use in the preparation of a wide range of polymers via emulsion polymerisation.
- Impart increased shear stability to the polymer latex.
- Increase pigment acceptance of the polymer latex.
- Improve adhesion to surfaces such as metals, wood, and paper/cardboard.



Metalworking Lubricants

- Provide excellent emulsification.
- Deliver anti-wear and extreme pressure (EP) properties.
- Enhance corrosion inhibition.



Detergents & Cleaners

- Effective surfactants for use in highly alkaline cleaning products.
- Highly effective hydrotropes for incorporating low-foam nonionics into highly alkaline cleaning products.



Pesticides & Agrochemicals

- Serve as emulsifiers and dispersants in pesticide formulations.
- Enhance wetting and spreading on plant surfaces.
- Act as tank additives, compatibilising materials such as micronutrients in spray tanks.



Textile & Leather Processing

- Provide wetting, particularly at high pH.
- Effective dispersants for pigments and dyes.
- Impart antistatic properties in textile lubricants.



Oil & Gas Industry

- Effective components for use as corrosion inhibitors and formulation aids.
- Provide effective scale inhibition.



Metal Treatment & Electroplating

- Used in metal cleaning, phosphating, and surface preparation.
- Support corrosion resistance and coating adhesion.



Paints, Coatings & Inks

- Act as emulsifiers in water-based formulations.
- Highly effective pigment dispersants, providing good stability and pigment strength.

