



COMPANY PRESENTATION

ESTICHEM^A_S

OUR OFFERINGS



FORMULATION INGREDIENTS

Esti Chem offers a broad range of formulation ingredients to the chemical industry for use in industrial cleaners, printing inks, lubricants and other formulated products. With three decades of experience in turning the vegetable building blocks into valuable raw materials for the formulator – the starting point is renewable raw materials.

We are a specialist for green chemicals, alternative solvents, solvent replacement products, functional surfactants, microemulsion packages, specialty lubricant esters and silicone-free defoamers.

Our products offer:

- ✓ Reduction of CLP hazard labelling of your surfactants and solvents
- ✓ Reduction or elimination of VOC content in your formulations
- ✓ Reduction of pH in heavy-duty cleaning products
- ✓ Removal of silicone oils from your defoaming products
- ✓ Improved lubricity of your water miscible or oil-based lubricant formulations

FORMULATION TECHNOLOGY

Esti Chem has accumulated extensive formulation knowledge over the years. Some of the typical application areas, where we can assist you as our customers with formulation knowledge, are:

- ✓ Replacement of aromatic hydrocarbons in formulated chemical products
- ✓ Replacing high-pH cleaners and degreasers with medium pH cleaner based on micro-emulsions of biodegradable ESTISOL esters
- ✓ Replacing hazardous solvent in printing ink cleaners, paint strippers and polymer removers
- ✓ Introducing surfactants with corrosion protection properties for offset ink cleaners

Esti Chem offers a broad range of guideline formulations and product data such as environmental documentation, rubber & plastic compatibility and emulsification data are available. Please contact us, to discuss your formulation development in our well-equipped application laboratory.

CUSTOMER DEVELOPMENTS

A key success criteria for a successful development project is a close cooperation between Esti Chem and our customers.

We have developed this business model over the years and it is today an important part of our growth strategy.

Formulated chemical products such as industrial cleaners are very diverse in their composition and application profile.

If our existing products should not fulfill the requirements for a specific project – Esti Chem can develop alternatives in partnership with you!

We naturally work under a Non Disclosure Agreement (NDA) and run development projects ranging from a few months to several years.

This is an opportunity for you to get access to technology not available on the open market.

ABOUT US

Esti Chem was founded in 1988 in Copenhagen, Denmark, and the company has been developing over the years to be an important supplier of ester-based technologies used in formulated chemical products.

Esti Chem operates on the b2b market with focus on the export markets. Our main market segments are industrial cleaners, graphic arts, construction chemicals, metal working lubricants, coatings and inks, foundry industry, polymer processing, production of emulsions and dispersions, and oil and gas.

Esti Chem has production in Denmark, Germany and Belgium. We operate a R&D and Tech Service Laboratory in Denmark. Our warehouse in Denmark supports our customers with back-up storage of a broad range of our products available from stock on short notice.

OUR VALUES

ENVIRONMENT, HEALTH AND SAFETY

We care for the environment. Our products provide environmental, health and safety benefits to our customers. We take responsibility for our work environment in everyday life and develop it for the future.

INNOVATION

We create valuable technical solutions in close cooperation with our customers. Sustainable raw materials are the basis for our product development. We focus on professional and personal development in order to create new solutions and results for the future.

QUALITY AND SERVICE

We have an excellent customer service and flexibility tailored to the individual customer's needs. We ensure the quality of our raw materials and products in order to deliver the right quality at the agreed time. Our certified processes take external and internal needs into account.

CREDIBILITY

We give priority to open and clear communication with customers, external partners and colleagues. We see each other's personal and professional diversity as valuable for Esti Chem. We live out our values and policies in our actions.

BEST QUALITY FOR THE HIGHEST DEMANDS

Esti Chem A/S delivers chemical products and services for industrial applications world-wide, either through own sales organizations, by specialized distribution channels or agent and distributors. Our products improve the work safety and external environment for our customers.

Esti Chem's quality system covers all aspects of the company's activities from product development, sales and marketing, production, logistics and EH&S.

Esti Chem holds ISO 9001, ISO 14001, and OHSAS 18001 certificates.



PRODUCTS

The Esti Chem product range consists of line and specialty products, formulation components and customer-specific developments. The products are formulated for low environmental impact and replacement of hazardous chemicals. We base our development on renewable raw materials wherever possible. Solvents, surfactants, lubricant components, defoamers and corrosion inhibitors form the base of the product range with selected trading products as supplementary add-on's.

ESTISOL

The **ESTISOL esters** are developed to be the formulators preferred alternative to aliphatic and aromatic hydrocarbons, limonene and VOC-classified oxygenated solvents in formulated chemicals products.

They reduce or eliminate the VOC content. They improve the products health and safety profile as most **ESTISOL esters** are non-labelled according to CLP and ensure an environmentally sound product profile without compromise to the technical performance.

ESTISOL can act as straight replacements, solvency boosters or carrier fluids in formulated products, e.g. industrial cleaners, degreasers, blanket and roller washes, printing inks, hand cleaners, paint strippers and oil field chemicals.

ESTISURF

This product series consists of single-component surfactants and surfactant packages with multi-functional properties.

The products offer the formulator multiple choices for formulating industrial cleaners with excellent technical properties and a good health and safety profile. Extensive application information is available on request.

Many **ESTISURF** products are applied in water-free products in mixture with ESTISOL and / or other solvents, and other **ESTISURF** grades are designed for use in aqueous formulation

ESTICLEAN

Stronger environmental pressure and increased health and safety regulations in the workplace require new types of cleaners. Esti Chem offers a selection of ready-for-use products as a complement to the formulation raw materials found in the ESTISOL, ESTISURF and other product groups.

ESTICLEAN products are generally applied for cleaning of work pieces and production equipment. The products can be applied in dip tanks, industrial washers, spray booths and also in manual cleaning processes utilising a cloth and brush. **ESTICLEAN** industrial cleaners offer excellent alternatives to aromatic hydrocarbon solvents and other problematic solvents, specially for the removal of oil, grease and asphalt from metal surfaces.

ESTICLEAN products find increasing use as cleaners and release agents in the asphalt and road construction industry as replacements for diesel and other hydrocarbons.

ESTILUBE

The **ESTILUBE** range consists of mono and polyol esters for use in metal working fluids and other industrial lubricants. These specialty products are applied as lubricity additives and film-forming components in the formulation.

The **ESTILUBE L-series** covers a range of mono esters with low odour and a low content of residual alcohol. The L-series esters are based on 'narrow cut' fatty acids. This means that a superior product quality is obtained with no light boilers or heavy residues.

The **ESTILUBE P-series** are based on pentaerythritol and selected mono and di-carboxylic acids and are available in varying viscosity ranges. Again, 'narrow cut' fatty acids are selected to obtain a superior product quality.

Commercial applications are found in water-miscible cutting fluids, neat oils, deep-drawing lubricants, grinding fluids, release agents, additive packages, de-watering fluids, rust removers, aerosols and many other areas.

ESTIMOL

ESTIMOL esters are multi-functional esters based on alkoxyated polyols, diacids and monocarboxylic acids developed for application in formulated functional fluids. **ESTIMOL** esters typically improve two or more of the following properties.

- Lubricity
- Emulsion stability
- Corrosion inhibition
- Coupling activity

RESIN CLEANER

These products are applied in the manufacturing industry, dealing with unsaturated polyester, epoxy or polyurethane resins.

Typical examples are:

- Production of wind mill blades
- The boat building industry
- The automotive industry
- Electronics industry
- Furniture industry
- Coating and adhesives production

They are used for cleaning of cutting tools, brushes, spray guns, rollers, pumps, hoses, blending vessels, transport containers and tank trucks.

DEFOAMER NON-SILICONE OIL DEFOAMERS

- Are highly efficient, silicone oil free dispersions, which are applied in formulated aqueous products.
- Can be formulated into the concentrate, but they can also be applied as tank side additives.
- Are available with varying solubility characteristics as show in below table.

All DEFOAMER grades do not contain PDMS or other silicone oils and they have no negative influence in subsequent surface finishing processes.

SPECIALITY DISTRIBUTION PRODUCTS

Esti Chem distributes selected specialty chemicals from international producers in the Nordic market. Please consult us to get information about the products available in your country.

A STRONG GROUP UNDER ONE ROOF

Since 2006, Esti Chem belongs via its parent company Additiv-Chemie Luers GmbH (ACL) to the family-owned Diersch & Schröder (DS) Group of companies based in Bremen, Germany. Ever since its founding in 1920, DS has evolved from a lubricant and mineral oil trading company to a modern energy company.

Based on more than 60 years of experience, Additiv-Chemie Luers (ACL) is an independent medium scale German producer of additives for metalworking fluids and cleaners.

ACL is an international operating company, which develops environmentally friendly products according to the latest technical standards and of maximum compliance.

The DS Group recently acquired the company LEVACO Chemicals GmbH located in Leverkusen, Germany. The company is an important producer of specialty surfactants and formulation additives and adds important chemical competence to the DS Group.



1988: Establishment of **Esti Chem A/S**, Copenhagen.
ESTICHEM

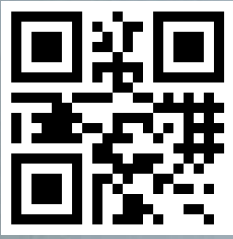
2006: **Esti Chem A/S** was acquired by **Additiv-Chemie Luers GmbH**.

2014: Acquisition of **LEVACO Chemicals GmbH**, Leverkusen.

1920: Founding of **Diersch & Schröder GmbH & Co. KG** based in Bremen.

1998: Acquisition of **Additiv-Chemie Luers GmbH**, Delmenhorst.

2009: **Trafolube GmbH** becomes a part of the DS Group, Duisburg.



Esti Chem A/S

Erhvervsparken 16
DK-4621 Gadstrup
Denmark

T: +45 56 653 372

F: +45 56 653 375

info@estichem.com

www.estichem.com

