

PETER GREVEN –

**Competence in
pharma, cosmetics and
food stuffs**



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Partner of industry

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Oleochemicals rank with the most important raw materials and auxiliary agents used in the pharmaceutical, cosmetic and food industries. We come into contact with these products daily without consciously noticing them. They enable the economical production of tablets and other pharmaceutical products. Deodorant sticks get their gel characteristics from the inclusion of these materials; creams and ointments also get their specific properties and consistency from their use.

The Peter Greven Company has been supplying these markets for many decades with its products and has a reputation as an innovative and competent partner in these industrial fields. Due to an expansion of production on the Venlo (NL) site, where the metallic soaps are produced exclusively from vegetable based fatty acids, under GMP conditions, our company has achieved a leading position in the market.



Pharmaceutical Applications

Besides the individual physical and chemical characteristics, the toxicological and physiological properties of many of the vegetable derived products are decisive in their being chosen for usage in the pharmaceutical industry. The reason for this is the natural basis namely of vegetable or animal fats. All the soaps and metal soaps extracted, as well as glycerine, esters and the fatty acids themselves, can be naturally metabolised without any adverse reaction.

LIGA MAGNESIUMSTEARAT MF-2-V

This is a vegetable magnesium stearate of a high purity manufactured by a special process. The product meets the following standards: DAB, Ph.Eur., BP, USP/NF and JP.

The validated process of manufacturing of the stearate guarantees constant physical properties of the final product when used in the production of tablets. This particularly applies to the hardness of the tablets and the speed of release of the included additives. The high percentage of fine particles in the LIGA MAGNESIUMSTEARAT MF-2-V guarantees a high lubricating and a good release effect, and therefore economic and profitable production. The usual dosage is about 0.2 to 1 % by weight.

The flow behaviour of the master batch powder is greatly improved, this property is also necessary for the efficient nebulisation of powders used in inhalers.

LIGA MAGNESIUMSTEARAT MF-3-V

LIGA MAGNESIUMSTEARAT MF-3-V is distinguished by the same properties as MF-2-V but possesses a higher specific surface area and a smaller average particle size. For this reason it was found to be useful in applications where processing conditions are more critical.

LIGA MAGNESIUMSTEARAT MF-2-K LIGA MAGNESIUMSTEARAT MF-3-K

A Kosher and Halal certificate for these types is available. The Jewish and Arab cultures now demand this for over the counter sales of medicines such as vitamin tablets.

LIGA NATRIUMSTEARAT NG

This sodium stearate is used as a gelling agent, opacifier and emulsifier. The product is manufactured from vegetable based fatty acid and fulfils the requirements of the USP/NF.

LIGA CALCIUMSTEARAT CPR-2-V

The properties of calcium stearate are comparable with those of magnesium stearate. It is therefore also physiologically safe and is produced to meet USP/NF standards. It is used as a lubricant, flow aid and water repellent. This latter property allows calcium stearate to be used in the production of effervescent tablets in order to prevent premature reaction due to absorption of water.

LIGA CALCIUMSTEARAT CPR-2-Ph.Eur.

In addition to USP/NF this grade of calcium stearate also meets the requirements of the DAB, Ph.Eur. and BP.

LIGA GLYCERIN 99,5 EURO

Glycerine plays a very important role in the pharmaceutical industry. It is used as a lubricant, as a solvent in many tinctures, as basis for the manufacturing of theophylline elixirs for the treatment of bronchitis etc. Glycerine is also essential for the production of capsules. LIGA GLYCERIN 99,5 EURO fulfils the requirements of the DAB, Ph.Eur., BP and USP/NF. This grade is particularly low in the proportion of chlorides and heavy metals present. The proportion of water is below 0.5%.

LIGA GLYCERIN 86 EURO

This product is produced to the same standards as LIGA GLYCERIN 99,5 EURO but has a glycerine content of 86%. It therefore has a lower viscosity, which makes the product easier to handle.

Cosmetics

Soaps are the oldest historically documented cosmetic products. In the cuneiform writings of the ancient Babylonians there are references to formulations for the manufacture of soaps for the cleansing of the body. Today surfactants have often taken over the function of soaps as a detergent. Nevertheless natural soaps can be found in many products, e.g. bar soaps. This is because of the physical-chemical properties and also due to the native basis of the soaps and their biodegradability.

In addition to the soaps, other fatty acid based chemicals are used in cosmetics, for which the same principles hold true.



LIGA GRUNDSEIFEN-NUDELN

This type of soap has a special composition of fatty acids and is used as the basis for the production of laundry soaps. The product provides good emulsification, cold-washing and dirt-carrying ability. The stability and fine foam structure can be improved by the addition of non-ionic surface active agents.

LIGA SPRÜHSEIFE GS

This product has the same properties as LIGA GRUNDSEIFEN-NUDELN, but is in the form of a spray-dried powder instead of extruded granules.

LIGA SPRÜHSEIFE POC

This is an alternative to LIGA SPRÜHSEIFE GS based on purely vegetable fatty acids.

LIGA ALUMINIUMSTEARAT DTC/V

A special aluminium stearate based on vegetable fatty acids especially developed for the production of creams and ointments. The product is characterized by a moderate gel strength at a relatively low gelling temperature of 80-120 °C. This results in very stable gels with good application properties and an excellent stability. The quantity used is dependant on the base oil but is between 1 and 4%.

LIGA ALUMINIUMSTEARAT ALG-V

LIGA ALUMINIUMSTEARAT ALG-V is a di-stearate based on a vegetable fatty acid and produces a high gel strength. It is used in the manufacture of ointments as a thixotropic agent and as a viscosity modifier. It also gives cosmetic powders better flow properties and adherence and it produces a slightly astringent effect.

LIGA NATRIUMSTEARAT NG

This sodium stearate is used as an emulsifier and whitening agent in cosmetics. However, the largest application is represented by the manufacture of deodorant sticks. A solution of about 10% of sodium stearate forms a hard, solid gel when cold. LIGA NATRIUMSTEARAT NG is ideally suitable because of its particle structure and its composition. The tendency towards crystallization of the gels can be stopped by addition of glycerine or IPM. LIGA NATRIUMSTEARATE NG is produced from vegetable based stearic acid.

LIGA GLYCERIN 99,5 EURO

Glycerine is known for its water retention properties. It therefore has a very beneficial influence on dry skin, a property which is useful in creams and lotions. It also works as a moisturizer and its sweet taste is used to advantage in the production of toothpaste etc.

LIGA GLYCERIN 86 EURO

This product has the same properties as LIGA GLYCERIN 99,5 EURO but with 86% glycerine content instead of 99.5%.

LIGALUB 11 GE

Glycerine-mono-stearate is dispersible in water and is soluble in warm fats and similar oleochemicals. Its HLB-value is 3.8. It is slightly emulsifying and works as co-emulsifier for the manufacture of W/O emulsions. LIGALUB 11 GE has a very positive effect on the stability of these emulsions.

LIGALUB 10 GE

This glycerine-mono-oleate with an HLB-value of 3.3 is highly suitable for use as an emulsifying agent for O/W emulsions.



Food stuffs

The properties of the fatty acid derivatives described also make them of interest in the food industry. The fact that most fatty acid derivatives are toxicologically and physiologically safe makes them ideal for this application.



LIGA MAGNESIUMSTEARAT MF-2-V **LIGA MAGNESIUMSTEARAT MF-3-V**

Magnesium stearate (E-No. 470b) is used as foamer and emulsifier in rusks, baking powder etc. It improves the quality and shelf life of many spice combinations as an anti-caking agent and water repellent. The product conforms to the Food Chemical Codes IV ed.

LIGA CALCIUMSTEARAT CPR-2-V

Calcium stearate (E-No. 470a) is used similarly to magnesium stearate. This product also conforms to the Food Chemical Codex IV ed.

LIGA MAGNESIUMSTEARAT MF-2-K **LIGA MAGNESIUMSTEARAT MF-3-K** **LIGA CALCIUMSTEARAT CPR-2-K**

These products have the same properties to those described above but can be supplied with a Kosher and Halal certificate.

LIGALUB 11 GE

Glycerine-mono-stearate (E-No. 471) is used as an emulsifier, anti-foam and a lubricating agent as well as a stabilizer in food stuffs. The applications stretch from manufacturing of glazes, puddings, coffee-whiteners, icecream to pastries. These products are necessary for the consistent production of high quality products.

LIGALUB 10 GE

Glycerine-mono-oleate is also listed under the E-number 471 as additive for food stuffs. It is used similarly to LIGALUB 11 GE. Additions of about 2% by weight work as an antioxidant in fats and oils.





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