



KLK OLEO

ENHEX/ EDENOR G
Enhanced Excipients for Pharmaceuticals

Made in Germany

KLK Emmerich GmbH

ENHEX/ EDENOR G Pharma Glycerine

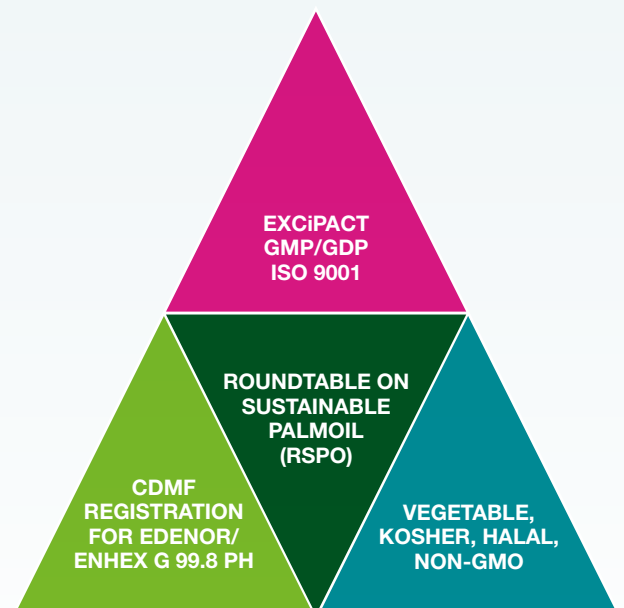
ENHEX G and EDENOR G Pharma Glycerine are non-toxic, hygroscopic, colourless, odourless and sweet-tasting viscous liquids. ENHEX G and EDENOR G are tested according to current European Pharmacopeia and US Pharmacopeia if applicable.

It has properties as a good solubilier, lubricant, plasticizer and agent for moisturizing and preserving. ENHEX G 99.8 PH, ENHEX G 86 PH, EDENOR G 99.8 PH as well as EDENOR G 86 PH are 100% natural and derived from vegetable, non-GMO sources.

Product Application:

ENHEX G 99.8 PH, ENHEX G 86 PH, EDENOR G 99.8 PH as well as EDENOR G 86 PH are used in many topical and systemic medications such as:

- **Capsules**
- **Enzymes**
- **Ear Drops**
- **Parenteral nutrition**
- **Lozenges**
- **Ointments**
- **Cough syrups**
- **Medical chewing gums**
- **Emulsions**
- **Suppositories**
- **Inhalation aerosols**
- **Injections**
- **Others**



Quality assurance:

Our Glycerine grades as pharmaceutical excipients come along with compliance to leading quality management systems and pharmaceutical qualifications:

ENHEX Medium Chain Triglycerides (MCT)

ENHEX MCT 64 is an EXCiPACT certified MCT Oil (GMP/GDP) which is a clear, colourless liquid and neutral in odour and taste. It acts as a carrier, coating agent, emollient, and lubricant. ENHEX MCT 64 is tested according to current European Pharmacopeia.

MCT Oil under our pharmaceutical brand name ENHEX is 100% natural and derived from renewable resources. Our MCT Unit is 100% backwards integrated and dedicated to the production of MCT Oil.

Product Application:

+ Softgel Capsules

- Seals the surface and creates a shine
- Prevents the capsules from sticking together
- Promotes dissolving of active substances
- Acts as a lubricant agent

+ Ointment & Creams

- Spreads very readily and evenly on the skin (good penetration and spreading)
- Does not leave a greasy film if used in small dose
- Helps to retain moisture in skin
- Acts as an emollient

+ Suppositories

- Adjusts to the desired consistency
- Disperses the API
- Inhibits crystallization

+ Transdermal applications

- Conveys the API to deeper layers of the skin
- Forms part of the oil phase

+ Aerosols (sprays, suspensions)

- Carries active substances soluble in oil
- Promotes absorption of the active constituent

+ Enteral nutrition

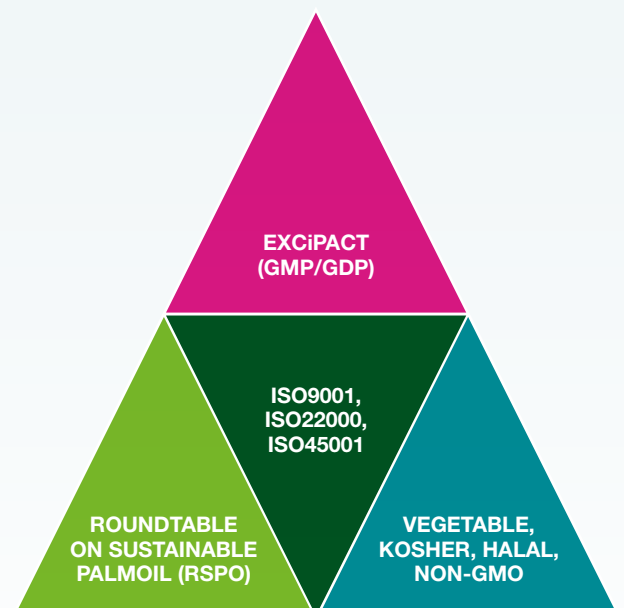
- Prevent muscle breakdown
- Increase muscle mass
- Fast source of energy
- Support ketogenic diets
- Decreasing body fat

+ Parenteral nutrition

- TPN: Total parenteral nutrition for patients with gastro-intestinal tract issues
- Alzheimer disease: nutritive properties for brain cells
- Prevent muscle breakdown

Quality Assurance:

Quality is our priority – ENHEX MCT 64 comes along with compliance to leading quality management systems and pharmaceutical qualification:



About KLK OLEO

As a global oleochemical producer, KLK OLEO is committed to supplying sustainable ingredients. Vertically integrated and a member of the Roundtable on Sustainable Palm Oil (RSPO), we ensure a highly transparent supply chain. Headquartered in Kuala Lumpur, KLK OLEO established various sites in Europe. The close proximity to customers and our technical aptitude allows us to meet the needs of the market. By thinking globally and acting locally, we are the leading oleochemical producer in Europe. We offer an extensive product portfolio, essential for diverse applications in distinct industries.

Based in Emmerich am Rhein and with further production site in Düsseldorf, the KLK Emmerich GmbH product portfolio ranges from Derivatives such as pharmaceutical MCT Oils and glycerine, Isostearic Acid and Triacetin next to a variety of fatty acids and glycerine.

KLK OLEO at a glance

30 Years of Excellence in Oleochemicals

13 Manufacturing Facilities Worldwide

Supplying Over 120 Countries

Fully Backwards Integrated Supply Chain

RSPO Supply Chain Certified (SCC)

Our Vision

GROWING TO BE THE MOST TRUSTED GLOBAL PARTNER IN OLEO-BASED PRODUCTS AND SOLUTIONS, THUS ENRICHING HUMAN LIVES IN A SUSTAINABLE MANNER EVERY DAY.



Quality Assurance

EXCiPACT/ ISO Certifications

To meet requirements of pharmaceutical companies our manufacturing sites in Europe are producing excipients according to EXCiPACT GMP/GDP and ISO 9001.

Additionally, KLK Emmerich GmbH is ISO14001, ISO22000, ISO45001 as well as ISO50001 certified.

Sustainability and Ethics

KLK Emmerich GmbH is part of Kuala Lumpur Kepong Berhad (KLK), a leading plantation group based in Malaysia. Consequently, all European manufacturing sites are backwards integrated for most of the oleochemicals produced.

KLK was amongst the founding members of the Roundtable on Sustainable Palm Oil (RSPO) in 2004 and substantially involved in the development of a comprehensive Sustainability Policy in 2014, adopting the principles and criteria of RSPO. The crust of the policy is related to the commitment towards no deforestation, no peat and no exploitation (NDPE).

The Roundtable on Sustainable Palm Oil (RSPO), established in 2004, is a global, non-profit, multi-stakeholder initiative on sustainable palm oil that unites more than 4000 members worldwide who represent all links along the palm oil supply chain.

Members of RSPO, and participants in its activities come from many different backgrounds, including plantations, processors, traders, consumer goods manufacturer and retailers of palm oil derived products, financial institutions, environmental and social non-governmental organisations.

Beyond that, KLK Emmerich GmbH is a member of SEDEX/SMETA 4-Pillar and EcoVadis audited and approved.




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