

ophtha futur[®]



purity



environment



safety



Dear valued customer

We are proud to present the new **ophthafutur**[®] catalogue, now designed as a quick-reference tool to support your daily practice. Integrated QR codes provide instant access to up-to-date technical data, instructions, and detailed product information — anytime, anywhere.

The catalogue features our premium endotamponades for retinal procedures, and viscoelastic solutions to protect intraocular tissues during surgery. With over 30 years of experience, we deliver top-tier quality and reliability to meet the highest professional standards.

The introduction of the European Medical Device Regulation (EU 2017/745) has redefined global benchmarks for health authorities, Notified Bodies, surgeons, and patients alike. The **ophthafutur**[®] product range remains at the forefront of this evolving landscape, seamlessly aligning with the latest regulatory and quality requirements.

Our team combines extensive expertise and dedication to innovation, constantly developing forward-looking tools that respond to the real-world needs of surgical practice.

ophthafutur[®] represents an innovative, collaborative spirit. We invite you to join us in shaping the future — please share your questions, projects and ideas. We're always open to new dialogue and partnerships.

Let's create the future of ophthalmic surgery — together.

ophthafutur[®]

Science for safety

Your **ophthafutur**[®] team



product portfolio

Product	Article-Nr.	Primary container & filling quantity	Units per box	Shelf Life [months]
ophthafutur® deca	500500	5 ml glass vial	1	36
	500501	7 ml glass vial	1	36
	500502	5 ml COC syringe	1	36
	500503	7 ml COC syringe	1	36
ophthafutur® octa	500504	5 ml glass vial	1	36
	500505	7 ml glass vial	1	36
	500506	5 ml COC syringe	1	36
	500507	7 ml COC syringe	1	36
ophthafutur® sil 1000	500508	10 ml glass syringe	1	36
ophthafutur® sil 2000	500509	10 ml glass syringe	1	36
ophthafutur® sil 5000	500510	10 ml glass syringe	1	36
ophthafutur® sf6	500512	15 ml glass syringe	1	36
ophthafutur® c2f6	500513	12 ml glass syringe	1	36
ophthafutur® c3f8	500514	9 ml glass syringe	1	36
ophthafutur® hpmc	500518	2 ml glass syringe	1	36





purity

ophtha futur® octa | deca



High patient and product safety

Multi-step proven & tested ultra-purification process

Safe, biocompatible, sterile, endotoxin-free products

Cyclo-Olefin Copolymers (COC) syringes

36 months shelf life

Perfluorooctane and Perfluorodecaline are perfluorocarbon liquids highly valued for their chemical inertness and established safety in ophthalmic use.

Nonetheless, residual manufacturing impurities may compromise this safety profile.

To address this, Pharmpur developed a classification matrix that evaluates impurities based on their potential harm and likelihood of occurrence through thorough risk analysis and advanced analytical methods.

At Pharmpur all classes of impurities are strictly monitored and removed through a validated multi-step ultra-purification process.

This process, applied to **ophthafutur® octa | deca**, goes beyond standard purification — delivering products of exceptional purity and thus, safety.

Discover our expertise and innovation — visit our website to learn more.





ophtha futur® sil 1000 | 2000 | 5000



High patient and product safety

Multi-step proven and tested ultra-purification process

Safe, biocompatible, sterile, endotoxin-free products

36 months shelf life

Silicone oils (Siloxanes or Polysiloxanes) are linear polymers composed of silicon and oxygen. They are widely used in vitreoretinal surgery despite their inherent risk of emulsification.

This can be greatly minimized by using highly purified silicone oils — completely free from both volatile and non-volatile potentially toxic oligosiloxanes.

Pharmpur ensures the safety of its silicone oils detecting, removing and controlling all critical impurities by a formerly patented, FDA-approved

ultra-purification process combining in-depth technical expertise, through thorough risk analysis and validated analytical methods.

The result is consistent and unparalleled purity in **ophthafutur® sil 1000 | 2000 | 5000**.

Since 1998, Pharmpur has been a global leader in ultra-purified silicone oils for ophthalmic use.

Discover our expertise and innovation — visit our website to learn more.





environment

ophtha futur®

sf6 | c2f6 | c3f8



High purity

Adjustable gas concentration

Environmentally conscious system

36 months shelf life

Fluorinated gases (F-gas), SF₆, C₂F₆ and C₃F₈ are largely used as tamponades in retinal surgery.

They are chemically inert yet pose a significant environmental threat, with SF₆ being particularly impactful — its global warming potential is 23,900 times greater than that of CO₂!

Given the healthcare sector's significant contribution to climate change, the EU has mandated a two-thirds reduction in F-gas usage by 2030.

Studies confirm that emissions vary depending on both the type of gas and the delivery system and that ophthalmologists, with their choices, have a role in making changes to mitigate the carbon footprint of ophthalmic surgery*.

ophthafutur® F-gas solution is the result of extensive research and development, combined with environmentally conscious decisions throughout the supply chain.

Discover our expertise and innovation — visit our website to learn more.



* Laura Wakely: Sustainability in eyecare: Intraocular gases and the climate emergency, Eye News, August 4, 2021



ophtha futur® hpmc



Crystal clear view

Endotoxin free

Preloaded syringe

36 months shelf life

HPMC is a dispersive ophthalmic viscosurgical device (OVD) used to create and maintain anterior chamber depth and visibility, as well as to protect intraocular tissues during surgery.

As a derivative of natural cellulose, removing microbial impurities effectively, specifically endotoxins, poses a considerable manufacturing challenge.

Equally demanding is achieving the desired viscosity while ensuring a clear, bubble-free view through the ocular media and maintaining smooth, effortless injectability.

ophthafutur® hpmc meets pharmaceutical-grade standards and is manufactured in full compliance with GMP guidelines in a strictly controlled clean room environment.

Filling under Class A clean room conditions ensures protection against contamination, while advanced vacuum filling technology guarantees a bubble-free final product.

Discover our expertise and innovation — visit our website to learn more.





quality standards

The whole product life cycle of the **ophthafutur®** product lines is controlled by an integrated quality management system incorporating the activities of all partners involved.

Pharmpur manufactures strictly according to the relevant standards, especially

ISO 13485,
EU GMP Guideline,
21CFR 820 and 211,
BGMP (Brazil),
KGMP (Korea),
I.R. Iran GMP,
TCP III Taiwan

Pharmpur is a medical device manufacturer according to MDR (EU) 2017/745. Certification is provided by the notified body DQS Medizinprodukte GmbH (CE 0297).

Pharmpur has a manufacturing authorization for Medicinal Products and a GMP certificate issued by the local Health Authority (Government of Upper Bavaria, reference no. ROB-53Ph-2677.Ph_2-245).

Pharmpur is an FDA contract manufacturer for Medical Devices, Drug Products and API (www.fda.gov, FDA FEI number 3005689226).

A modular system of manufacturing as well as documentation processes enable optimized and highly efficient validation and qualification procedures of all relevant processes and equipment. On this basis, medical devices and pharmaceuticals can be manufactured on an equivalent quality level. This was and is frequently confirmed by inspections by the world leading Health Authorities.

The whole **ophthafutur®** team is dedicated to further improving the high level of the integrated quality system and to support its customers with related results and experiences.

ophtha futur[®] manufacturing

about the manufacturer

Pharmpur GmbH is the exclusive manufacturer of the ophtha futur[®] products. It can look back to over 30 years of successful history with the focus on contract manufacturing in the ophthalmic sector. Millions of units of ophthalmic liquids manufactured at Pharmpur have been used all over the world.

Pharmpur is one of the European pioneers in the purification of perfluorocarbon liquids and silicone oils for ophthalmic use. A team of passionate scientists plays the leading role as inventor and developer of products and processes ensuring the unmet quality of the brand.

Over the years the company has organically developed into a state-of-the-art organization with expertise in fill-and-finish manufacturing of medical devices and pharmaceuticals, product development and quality management.

A passionate and highly educated staff ensures the continuous present and future development of the company.

manufacturing excellence made in Germany

The concept of combining all critical production steps under one roof guarantees conformity, consistency and excellent quality. The quality of the raw materials, of which the majority is synthesized and ultra-purified in-house according to proprietary processes, meets the highest international standards.

Suppliers and outsourced activities are managed and monitored by Pharmpur according to a risk-based approach that goes beyond established regulatory frameworks.

Pharmpur maintains validated procedures for compounding, aseptic filling, autoclaving and dry heat sterilization, as well as for the associated packaging processes. Stringent quality controls are performed on each batch in internal, fully owned and equipped laboratories.

product-portfolio

Pharmpur is specialized in the fill-and-finish manufacturing of ready-to-use syringes and vials.

The product range includes gases, low and high viscosity products as well as gel-type media (viscoelastic substances). The manufacturing processes are based on a modular system and documented in a hybrid QMS using a validated ERP software and paper-based documentation.



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