CELLOPHIL BIOMEDICAL POLYMER

Opportunity

CIS Pharma has developed Cellophil™, a group of polyacryloyl-alpha-aminoacids that show superior biocompatibility in comparison to polymers currently used in biomedical applications such as PMMA, MMA, HEMA and the like.

Cellophil™ polymers improve the acceptance of many implants and medical devices.

In addition to many applications in the field of implants and medical devices Cellophil™ is particularly designed for optical lenses, drug delivery and also may be used as additive for food and cosmetics or as a fiber for fabrics.

Technology

Cellophil™ is a group of polyacryloyl-alpha-aminoacids that show superior biocompatibility in comparison to polymers currently used in biomedical applications such as PMMA, MMA, HEMA and the like.

Patent Matter of composition
US 60/684,175

Cellophil ™ polymers are non-biodegradable, non-immunogenic, amphoteric and are highly tissue-, blood- and cell-compatible. We have designed different Cellophil™ amino-acid structures based on lysine, serine, tyrosine, cysteine, hydroxypoline and threonine and combined them in different rates with acrylics. Doing so, we control chemical and physical characteristics of the final product, such as hydrophilicity, hydrophobicity, water content, porosity and pore structure, optical clarity, adhesive properties, surface texture, permeability and other mechanical properties. Whatever the composition / property of the Cellophil™ polymers, they are highly biocompatible.

Biocompatibility was shown in-vitro by measuring the confluence of differentiating cells. Comparing the confluence data of Cellophil™ to currently available polymers we show that Cellophil™ polymers are far superior to HEMA, PMMA, MMA etc. The biocompatibility is as high as collagen, the natural human polymer (control).

Cellophil™ polymers improve the acceptance of many implants and medical devices. The healing process may be shortened and mechanical properties be optimized for a safer use. Cellophil™ polymers also create new applications of polymers as biomedical devices.

Ophthalmology / Eye Care
- Intraocular Lenses
- Contact Lens
- Drug Delivery
- Synthetic Cornea

Cosmetic / Reconstructive
- Breast Implants

Orthopaedic
- Osteosynthesis
- Intervertebral Disks
- Tendons

Cardiopulmonary / Vascular
- Blood Vessels
- Heart Valve

Otorhinolaryngology
- Ear Drums

Dermatology
- Woundcare
- Artificial Skin

Gastroenterology
- Artificial Colon

Medical Devices
- Surgical Threads
- Drug Delivery

Select applications of Cellophil™

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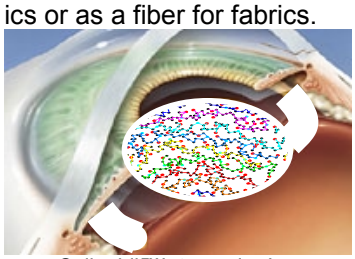

Cellophil™ Intraocular Lens

A special focus of our approach is the use of Cellophil™ to deliver drugs to the targeted site. Drugs applied might be charged positive or negative or can be aromatic without charges. With a special technique we load Cellophil™ matrices and control the release of the compound.

CIS Pharma

CIS Pharma is a pharmaceutical research company. It is located in Bubendorf, Switzerland, in the vicinity of Basel. The key business of CIS Pharma is to discover novel active pharmaceutical ingredients and medical devices. For over 50 years, CIS Pharma has been licensing innovative technologies to a wide range of life sciences companies. In co-operation with its development partners CIS Pharma offers the full range of drug discovery, drug development and commercial manufacturing of active pharmaceutical ingredients.

Contact

CIS Pharma welcomes your interest in Cellophil™ biomedical polymer. Please contact

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