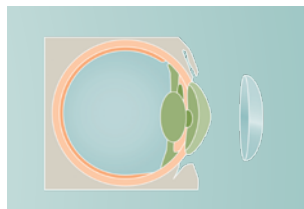
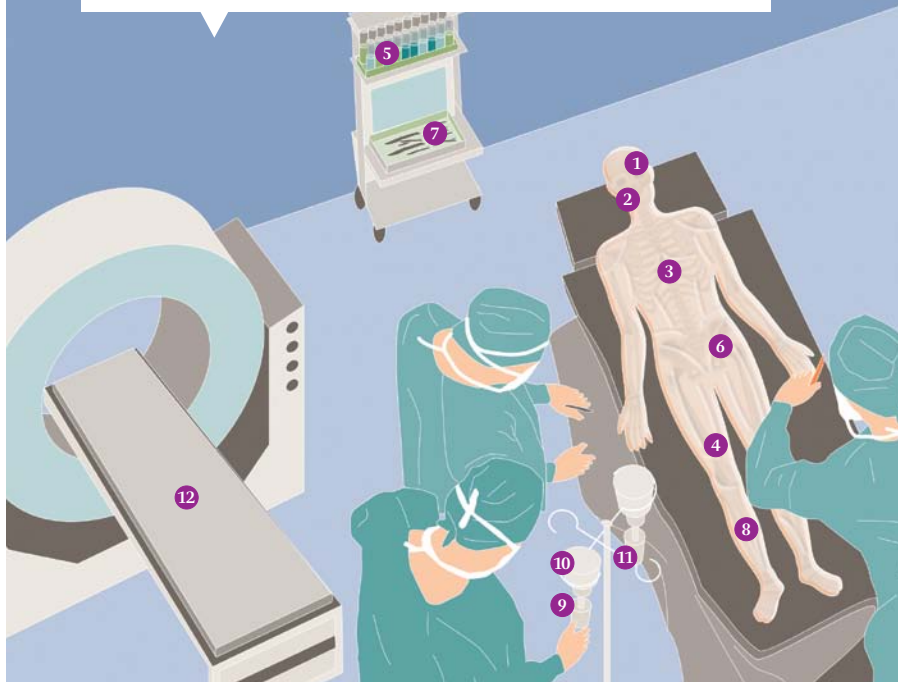


# A MATERIALS TOOLBOX for medical technology



## Customized materials solutions for medical devices



### 1 VISIOMER®

VISIOMER® UHP HEMA, MMA, HEMATMDI, EGDMA, TRGDMA: As one of the leaders in the production of Methacrylate monomers, Evonik offers highly purified hydroxyester and multi-functional methacrylates for the production of diverse medical products.

Typical applications include: Contact lenses, IOL, bone cements, dental fillings and dentures.

**As one of the technology leaders in materials design** and with more than forty years experience, Evonik offers customized products for the medical sector.

The product portfolio includes special polymers for medical technology and biomaterials for long- and shortterm implants as well as non-implants applications.

Evonik. Power to create.



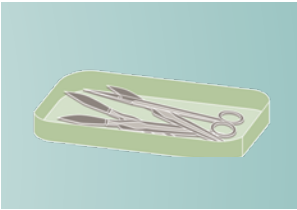
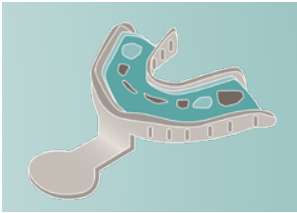
For further information  
please visit our website or  
contact us.

[www.evonik.com/medical](http://www.evonik.com/medical)

## 2 POLYMER VS. RV, MV and NANOCRYL®

Evonik Hanse GmbH offers a wide range of silicone and acrylic based materials which can be used in formulations for different medical products.

**Typical applications include:**  
Dental impression, bite registrations, composite fillers, exoprothetics and cushionings.



## 2 DEGACRYL®

Products of the DEGACRYL® range are PMMA polymers and copolymers distinguished by consistent quality with narrow specifications and superior free flowing properties. A broad portfolio allows choosing the suitable type for applications as in the dental and medical fields.

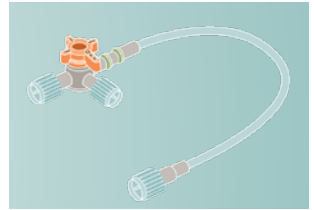
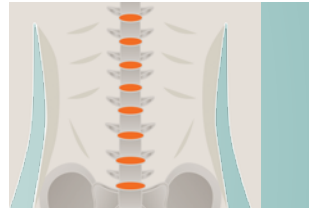
**Typical applications include:**  
Dentures, artificial teeth, bone cement.



## 3 VESTAKEEP® PEEK

Implants from VESTAKEEP® PEEK provide a new level of quality in medicine: our PEEK polymers are used especially because of their outstanding biocompatibility and biostability.

**Typical applications include:**  
Spine, sports medicine, trauma, CMF, cardiovascular, drug ports, dental, medical textiles, ophthalmic, surgical instruments, housings.



## 7 EUROPLEX® PPSU sheets and VESTAKEEP® PEEK films

Our EUROPLEX® sheet materials are especially suitable for sterilizable containers and orthopedic applications. VESTAKEEP® films may be used as a sliding layer or electrical insulator in chemically demanding environments.

## 8 DEGAPLAST®

Orthopedic exoprotheses provide high mobility and freedom of movement to disabled people. Besides metals, polymers play an important role here, too, with DEGAPLAST® based lamination systems occupying a prominent position, particularly in the handcrafting industry.

DEGAPLAST® resins are methacrylate formulations based on MMA, solved PMMA, and special modifiers. The cured parts are thermoplastic and not brittle.

## 9 TROGAMID® Care

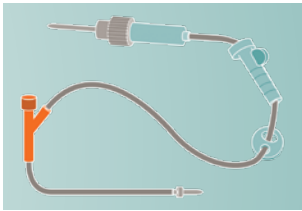
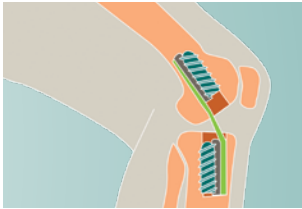
TROGAMID® Care is a highly transparent PA that is resistant to stress cracking. Because of its outstanding chemical resistance it is used especially in applications that come into contact with drugs and body fluids.

**Typical applications include:**  
Stopcocks, catheters, hearing aids, housings.

#### 4 RESOMER®

Fractures can now be treated with biodegradable implants made from the RESOMER® family of lactide/glycolide based polyesters. They don't have to be removed in a follow-up surgery but dissolve in the body over defined time periods.

**Typical applications include:** Sports medicine, trauma, CMF, coronary stents, drug depots, regenerative medicine, medical coatings.



#### 10 CYROLITE®, CYREX® and XT®

Acrylic based multi-polymer compounds for medical devices and packaging delivering excellent chemical and lipid resistance. Sterilizable, bondable, BPA free and antimicrobial grades are available.

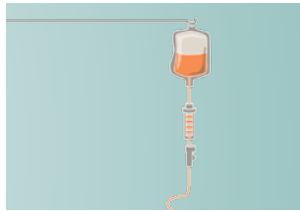
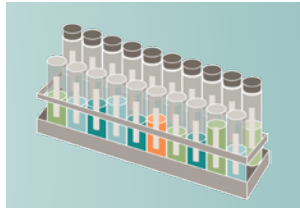
**Typical applications include:** Medical consumables like e.g., luer locks, dialyzer housings, protection caps and covers, blood/plasma separators, collection and specimen vessels, connectors and injection ports, catheter accessories.



#### 5 CYROLITE® MD

Acrylic Polymers for medical diagnostics applications requiring exceptional light transmittance and optical clarity. High flow for fast processing and multicavity tooling.

**Typical applications include:** Diagnostic cuvettes, diagnostic test packs, optical sensor view ports, crystallography trays, microfluidics, rotors.



#### 11 VESTODUR®

Specialty VESTODUR® polybutylene terephthalate compounds are licensed for direct contact with active ingredients. These compounds are easy to process and the moldings made of them are dimensionally stable.

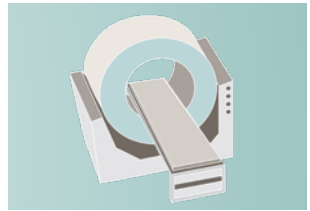
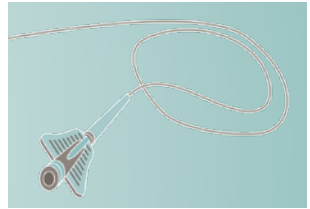
**Typical applications include:** Blood filters.



#### 6 VESTAMID® Care

VESTAMID® Care PA (polyamide)/PEBA (polyether block amide) is used successfully as a catheter material because of its high bursting resistance. This is provided by the combination of flexibility and pliability, toughness and hardness.

**Typical applications include:** Catheters, housings, surgical instruments.



#### 12 ROHACELL®

Medical table tops using ROHACELL® polymethacrylimide foam as the structural core are not only lighter, but much thinner. Their reduced mass means radiation levels required for radiology can be kept at a minimum, thereby exposing the patient to much less radiation and lowering health risks. Thinner table tops also reduce scatter radiation and provide X-Ray images of much higher quality.

**Typical applications include:** Table and couch tops for X-Ray and CT scan machines, operating tables, mammography plates, fixation devices for X-Ray therapy.



### Contact details

**VESTAKEEP® PEEK**  
[www.vestakeep.com](http://www.vestakeep.com)

**VESTAMID® Care, TROGAMID® Care  
and VESTODUR®**  
[www.vestamid.com](http://www.vestamid.com)  
[www.trogamid.com](http://www.trogamid.com)  
[www.vestodur.com](http://www.vestodur.com)

**EUROPLEX® PPSU sheets**  
[www.performance-plastics.com](http://www.performance-plastics.com)

**ROHACELL®**  
[www.rohacell.com](http://www.rohacell.com)

**RESOMER®**  
[www.resomer.com](http://www.resomer.com)

**DEGACRYL® and DEGAPLAST®**  
[www.degacryl.com](http://www.degacryl.com)  
[www.evonik.com/degaplast](http://www.evonik.com/degaplast)

**VISIOMER®**  
[www.visiomer.com](http://www.visiomer.com)

**CYROLITE®, XT®, CYREX®  
and CYROLITE® MD**  
[www.cyrolite.com](http://www.cyrolite.com)

**POLYMER VS and NANOCRYL®**  
[www.evonik.com/hanse](http://www.evonik.com/hanse)

### Disclaimer

This information and all further technical advice is based on our present knowledge and experience. However, it implies no liability or other legal responsibility on our part, including with regard to existing third party intellectual property rights, especially patent rights. In particular, no warranty, whether expressed or implied, or guarantee of product properties in the legal sense is intended or implied. We reserve the right to make any changes according to technological progress or further developments. The customer is not released from the obligation to conduct careful inspection and testing of incoming goods. Performance of the product described herein should be verified by testing, which should be carried out only by qualified experts in the sole responsibility of a customer. Reference to trade names used by other companies is neither a recommendation, nor does it imply that similar products could not be used.

**Evonik Industries AG**  
Medical Industry Team  
[www.evonik.com/medical](http://www.evonik.com/medical)