

# A MATERIALS TOOLBOX for medical technology





**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 specialty methacrylate monomers and specialty polymers for medical technology, biomaterials for long- and short-term implants as well as non-implants applications.

Evonik. Power to create.



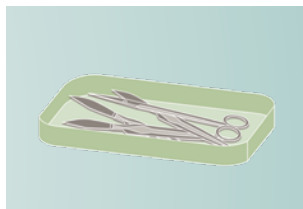
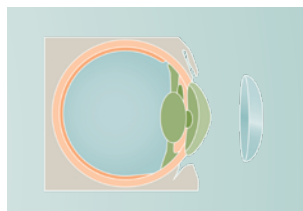
For further information  
please visit our website or  
contact us.

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

## 1 VISIOMER®

VISIOMER® UHP HEMA, HEMATMDI, TRGDMA, PEG200DMA and EGDMA: As one of the leaders in the industry of methacrylate monomers, Evonik offers highly purified HEMA and multi-functional methacrylates for the production of diverse medical products.

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



## 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.

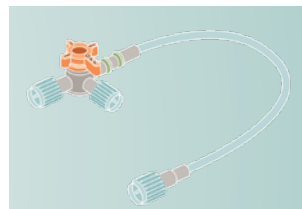
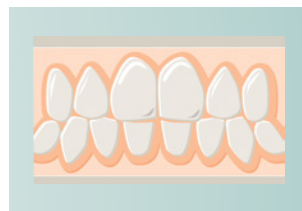
**Typical applications include:** Dental impression, bite registrations, composite fillers, exoprothetics and cushionings.



## 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.



## 6 VESTAKEEP® PEEK films

VESTAKEEP® films may be used as a sliding layer or electrical insulator in chemically demanding environments.

## 7 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.

## 8 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.

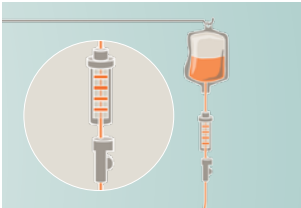
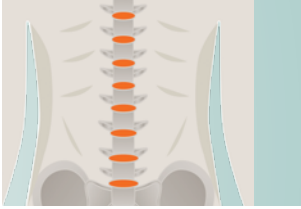
**Typical applications include:** Stopcocks, catheters, hearing aids, housings.

### 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.



### 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, regenerative medicine, medical coatings.



### 9 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.

### 10 ROHACELL®

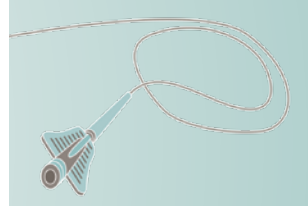
Medical table tops using ROHACELL® polymethacrylimide foam as the structural core are not only lighter, but much thinner. Their reduced mass means radiation levels required for radioscopy can be kept at a minimum, thereby exposing the patient to much less radiation and lowering health risks. Thinner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

### 5 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.



#### 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, VESTAMID® Care, TROGAMID® Care and VESTODUR®**  
[www.evonik.com/medical-technology](http://www.evonik.com/medical-technology)

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

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

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

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