More than 55 countries and 550 dealers

Dentists all over the world use materials of company TehnoDent

www.tehnodent.org
Main goal of the company
- high-quality and efficient production along with constant innovations.

We guarantee that our products are produced from high-quality raw materials using modern equipment for pharmaceutical production through application of original technologies.

We proudly introduce the following groups of materials in this information edition:

–Preventive materials
–Materials with calcium hydroxide
–Cements
–Endodontic materials
–Auxiliary materials

We are thankful to dentists for using our materials in their practice and for clinical experience gained.
A special thanks to dental practitioners, departments of the higher medical education institutions for assistance in research and providing materials for the catalogue.
We are sure that our information will be of great use for dentists who have just got acquainted with it. As well as for those who have already gained experience of working with our materials.

Best regards, TehnoDent team
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**Preventive materials**

**Poliren Polishing Paste No. 1**
Contains acidic component and abrasive material

Packaging:
syringe (8 g),
jar (45 g),
tube (50 ml)
REF 014-01-008;
REF 014-01-045;
REF 014-01-050

**Indications for use**
- Softening and removal of tartar without damaging enamel

**Advantages**
- Quick softening and removal of tartar
- Suitable for targeted application
- Easy to wash away with a stream of water and air
- Pleasant refreshing flavour

*Picture 1. Initial condition before treatment*  
*Picture 2. After treatment with Poliren No. 1 paste*

Alternatives: Detartrine - Septocont, France; Kiint - Voco, Germany.
Poliren Polishing Paste No. 2
Contains abrasive material (silicon oxide), fraction: 30-50 μm

Packaging:
syringe (8 g),
jar (45 g),
tube (50 ml)
REF 014-02-008;
REF 014-02-045;
REF 014-02-050

Indications for use
- Treatment of the enamel before teeth restoration or whitening, before fissure sealing
- Soft plaque removal
- Prevention of caries

Advantage
- Effective professional enamel cleaning
- Effective removal of soft plaque and pellicle from the less accessible areas and fissure
- Easy to wash away with a stream of water and air
- Pleasant refreshing flavour

Alternatives: Detartrine Z - Septodont, France.

Flow-Cleans-PROFI
Powder No. 1
Contains calcium carbonate (50-70 μm)

Packaging:
250 g plastic jar
REF 011-01-250

Indications for use
- Preventive cleaning of tooth enamel by air abrasion

Advantages
- Effective and gentle removal of plaque, soft dental deposit and pigmentation as well as teeth whitening
- Proper cleaning of fissures before sealing
- Does not result in dental hyperesthesia
- Does not clog the hand piece
- The Powder consists of spherical particles, 'sweeping' of the defect, and the abrasive particles of the split form, cleaning hard tissue surface.

Photo of the powder Flow-Cleans-PROFI with x100 zoom

The possibility to create mirror-like surface by soft abrasive material after treatment is of special clinical interest.

Pic. 1. The surface of the extracted tooth before treatment.
Pic. 2. The surface treated with Flow-Cleans-PROFI Powder.

SEM Image. Department of Dentistry, Faculty of Medicine, Belgorod State University, 2013

Alternatives: AIR-FLOW - EMS, Switzerland
Desensetin
Suspension for hard tissue desensitization
Contains arginine, calcium phosphate, sodium fluoride

**Indications for use**
- Dental hard tissues hyperesthesia reduction
- Prevention of caries

**Advantages**
- Immediate and reliable hard tissue desensitization
- Sealing and reconstruction of enamel microdefect
- Deep penetration of a medication into the dentinal tubules
- Pleasant refreshing flavour
- Multipurpose usefulness: applications, trays

**Packaging:** syringe (5 ml) or bottle (5 ml)
REF 010-03-005

**Important information**

**ALKALINE ENVIRONMENT**

OH⁻ OH⁻ OH⁻ OH⁻ OH⁻

Dentine Defect Dentine

**ACID ENVIRONMENT**

H⁺ H⁺ H⁺ H⁺ H⁺

Dentine Defect Dentine

Having high buffer capacity and ability to selective ionization **Arginine** counteracts pH change. Penetrating into dental tubules and microdefects arginine forms a complex compound that precipitates in a microdefect, seals off and bars irritants. Calcium phosphate as a part of the medication is a source of calcium and phosphorous in a required for hard tissues consolidation.

**Research techniques and targets:**
3 groups of 25 persons each (20 men and 55 women of 18 - 45 years old). The information is provided by Dental Polyclinic No. 18 of Saint Petersburg.

**Results:**
Administration of a suspension containing arginine and calcium phosphate results in prompt sensibility reduction with a prolonged effect especially when using the method of rubbing the medication on the sensitive spots of teeth with a finger.

The results of a suspension administration depending on the application technique:
- rubbing the medication directly on the hypersensitive spots of teeth with a finger
- treatment by toothbrush
- treatment by rotary attachment and circular brush

**Hypersensitivity indicators in case of air jet action**

**Alternatives:** Sensitive Pro-Relief - Colgate.
Ftor-lux
Kit for deep-penetration fluoridation of enamel and dentine
Based on magnesium fluosilicate and calcium hydroxide

Packaging:
10 ml bottle with a dropper-cap, 10 ml bottle with a pipette-cap
REF 013-02-010.010

Indications for use
- Treatment of dentine of deep cavities and protection of pulp before filling
- Prevention of primary and secondary caries, white spot caries
- Fissure sealing without preparation of the enamel
- Treatment of hard tooth tissues in treatment of periodontitis

Advantages
- Persistent and reliable (is not brushed away with toothpaste)
- Prolonged bactericidal activity
- Immediate relief of hypersensitivity in patients
- Prolonged maintenance of fluoride ions concentration and ensuring long-term remineralization

Independent Research*

Results: twice-a-year application of Ftor-lux reduces the frequency of caries development more effectively.

*The information was kindly provided by Secondary School No. 19 of Yoshkar-Ola city

Alternatives: TiefenFluoride - HumanChemie, Germany
Ftor-lux
Fluoride Varnish
Contains calcium fluoride and sodium fluoride, aminofluoride

Packaging:
13 ml bottle with a dropper-cap
REF 013-01-013

Indications for use
- Cervical dentine hypersensitivity, hypersensitivity of “live” tooth prepared for a crown
- Teeth sensitivity after restoration, preparation, dental deposit removal, enamel polishing or teeth whitening
- Prevention of primary teeth or wisdom teeth caries
- Fissure protection at the time of their genesis

Advantages
- Immediate pain reduction in patients
- Promoting hard tooth tissues remineralization
- High concentration of fluoride ions
- No colouring effect

Diagram of fluoride release by varnish film

Sodium fluoride restores the chemical equilibrium of the liquid (saliva), preventing enamel demineralization.

Calcium fluoride in the acid medium of the oral cavity serves as prolonged and stable source of calcium and fluoride ions.

Aminefluoride - an organic compound with enhanced fluoridation - ensures immediate formation of calcium fluoride globules on the enamel surface, prevents calcium loss and reduces permeability of the enamel.

Alternatives: Bifluorid 12 - VOCO, Germany.
Materials
with calcium hydroxide

Calcetin
Cavity liner paste
Based on calcium hydroxide

Packaging:
syringe (7 g),
dispensing tips
REF 004-01-007

Indications for use
- Direct and indirect pulp capping
- Traumatic, acute serous and chronic fibrous pulpitis
- Apexification and apexogenesis

Advantages
- Ready-to-use form of presentation
- High content of calcium hydroxide
- Minimal air contact
- Convenient point-contact application on the deep dental cavity floor
Materials with calcium hydroxide

**Calcetin**
Cavity liner powder
Based on calcium hydroxide

Packaging:
dark glass jar (7g)
REF 004-02-007

**Indications for use**
- Direct and indirect pulp capping
- Traumatic, acute serous and chronic fibrous pulpitis
- Apexification and apexogenesis

**Advantages**
- High content of calcium hydroxide
- Antimicrobial effect due to high pH value (12.8)
- Increases pulp regenerative ability and stimulates secondary dentine formation
- Fits any liners and filling materials
- Easily mixed with water for receiving the paste of the necessary consistence

Alternatives: Calcimol - VDCO, Germany; Calcipulpe - Septodont, France

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**Cupratin (suspension No. 1)**
For treatment and filling of root of tooth
Based on calcium hydroxide

Patented method of producing

Packaging:
dark glass jar (20 g)
REF 006-01-020

**Indications for use**
- For washing of infected root canals
- As a thin cap near pulp for frontal teeth
- Direct pulp capping
- Apexification
- Primary teeth treatment

**Advantages**
- Pure fine calcium hydroxide
- High alkalinity (pH 12.8)
- Stimulates dentine and hard tissue formation
- Optimal composition

Alternatives: Fine calcium hydroxide - Humanchemie, Germany

---

**Cupratin (suspension No. 2)**
For treatment and filling of root of tooth
Based on copper-calcium hydroxide, hydroxocupratoth

**Indications for use**
- Root treatment with electro(depo)horesis or without electro(depo)horesis
- Treatment of periodontal pockets
- Indirect pulp cap

**Advantages**
- Meta-stabilized equilibrium system
- Highly bactericidal suspension against all kinds of microbes
- Product consistence can be regulated by adding distilled water

Alternatives: Cupral - Humanchemie, Germany
Tempodent
For temporary tooth filling
Based on zinc oxide, zinc sulphate / 2 types of packaging

Packaging:
- paste – glass jar (50 g)
- powder – plastic jar (80 g/200 g)
- REF 002-02-050;
- REF 002-01-080;
- REF 002-01-200

Indications for use
- Temporary tooth filling in caries treatment

Advantages
- Available in two forms (water-soluble powder and ready-made paste)
- High-ductile material
- Does not contain eugenol
- Quick hardening (10 minutes)
- Safe tooth cavity sealing
- Applicable for paedodontics

Dentist review
Tempodent, temporary tooth filling material, proved to be efficient. Material is easily applied into the cavity leaving no traces either on gloves or on the tools. Temporary filling formation using Tempodent material causes no difficulties; fast hardening and absence of any taste and smell makes its use convenient both for a dentist and for a patient. I’ve been using Tempodent for a year and a half and thanks to Tempodent exceptional strength and high adhesion properties during this period no one patient has referred to me repeatedly during this period prior to appointed time by reason of temporary filling deformation or filling out. At the same time Tempodent is easily taken out of the cavity either by ultrasonic scaler or by dental explorer manually.

Perspektivy clinic, Belgorod

Alternatives: Cimpat - Septodont, France
**Aqua-Cem**
(white, light yellow, goldish)
Zinc-phosphate cement
For fixation and filling
Based on zinc oxide, aluminium and zinc phosphate, orthophosphoric acid

**Packaging:**
- plastic jar (100 g),
- dropper-bottle (60 g),
- measuring spoon, mixing pad
REF 009-01-100.060

**Indications for use**
- Single crowns and bridgework fixation
- Primary teeth filling
- Filling of teeth to be covered by crowns
- Insulating cap for filling materials

**Advantages**
- Contains calcium fluoride – anticaries component
- High compressive strength: for fixation - 105 MPa, for filling - 115 MPa
- Easy mixing and homogeneous texture
- Available in three colours
- Optimal working time (1.5-2 min.) and setting time (6-8 min.)

**Important information**

![Graph showing compressive strength over curing time](image)

- Aqua-Cem (TehnoDent) indicator of dental cement strength exceeds the analogous indicator under standard by 50%

**Alternatives:**
Adhesor - Spofa-Dental, Czech Republic
GlassyCem
radiopaque glass ionomer restorative cement
Based on fluoro aluminosilicate and polyacrylic acid, tartaric acid

Packaging:
powder - dark glass jar (10 g);
liquid - dropper-bottle (8 g);
powder - dark glass jar (20 g);
liquid - dropper-bottle (16 g)

Indications for use
- Filling restoration of the cavities of I, II, III and V class (according to Black classification)
- ART-technique filling
- Primary teeth filling
- Fissure sealing, of small defects, caused by non-carious lesion of teeth substances
- In aim to form the layer-base for the composite restoration
- For temporary filling

Advantages
- Good adhesion
- Optimal time of hardening
- Compression strength 170±5 Mpa
- Prolonged anti-caries effect, fluoride release
- Radio-opacity
- Biocompatibility
- Proper aesthetic characteristics
- VITA shades guide: A1, A2, A3, A3.5, B1, B2, B3, C1, C2

Aesthetic properties of GlassyCem restorative GIC
Transparency in comparison

Clinical case
Patient woman 16-year-old.
After the orthodontic treatment (photo 1) the patient has complaint on pain caused by chemical and thermal irritants in tooth 1.3, the presence of caries cavity and unsatisfied aesthetics of the smile.
Objectively: the oral cavity hygiene is unsatisfied, gingival papilla and interdental gingiva are swollen, hyperaemic and bleed. There are cavities of different depths on all teeth. The tooth 1.3 – gingival recession and vestibular plate of alveolar portion, dentine caries and root caries. After necrectomy and minimal-invasive and preparation the cavity was treated with 2% chlorhexidine bigluconate and filled with glass-ionomer cement GlassyCem. After grinding and polishing of restoration, on its surface was applied special finishing varnish GlassyCem (Photo 2).
At the next attendance (after a week), there were no complaints on the pain in teeth 1.3, 1.2 and 1.1. The patient was satisfied with aesthetic result of the treatment. It was noticed the significant reduction of inflammation in periodontal tissues of tooth 1.3 (photo 3).

We want to express our gratitude for the provided material to A.E. Anurova, T.F. Kosyreva, D.S. Roshchina, V.D. Shegoleva (Moscow)

Alternatives: Fuji IX - GC, Japan
GlassyCem
radiopaque glass ionomer luting cement

Based on fluoro alumino-silicate and polyacrylic acid, tartaric acid

Packaging:
powder - dark glass jar (20 g)/
liquid - dropper-bottle (16 g)
REF 021-01-020.016

Indications for use
- Fixing of crowns, dental bridgework, inlays and onlays
- Forming of the stump of the tooth

Advantages
- Prolonged anti-caries effect
- Radio-opacity
- Biocompatibility
- Suitable for the fixation of metal-free crowns and bridges made of high-strength types of ceramics
- Film thickness 12 μm
- Good adhesion

Adhesion force = ionic forces

Scheme of interaction of polyacrylic acid and dentine calcium ions

- Adhesion to dentine using conditioner 6,5 – 7,5 MPa
- Adhesion to dentine without using conditioner 4,5-5,2 MPa

Alternatives: GC - Fuji I, Japan
GlassyCem
radiopaque glass ionomer restorative cement
for kids
Based on fluoro aluminosilicate and polyacrylic acid, tartaric acid

Fluorides could be released from the solidified material and then re-absorbed by this material, and, without affecting the physical properties of the filling.

The sustained release of fluoride ions contributes to the remineralization process and provides anticaries effect.

Graham J. Mount

Clinical case

The Child 7 years old.
Objectively: Satisfying general condition, no pain complaints.
Express uncontrolled fear of treatment, at the same time allows make inspection and X-ray diagnosis, but the sight of turbine and mechanical handpiece causes panic attacks, while all the other manipulations is allowed by the child.
Due to this, to adapt the child to the dental treatment, oral cavity sanation began with atraumatic restorative treatment (ART) of the tooth 6.3.
The excavator and enamel knife under the control of caries marker (photo 1) removed demineralized tissue. At the bottom of the cavity has left the pigmented, but unstained by the caries marker dentine (photo 2).
Then caries cavity is treated with 2% solution of chlorhexidine bigluconate and filled with Glass-Ionomer Cement GlassyCem (Photo 3). The grinding and polishing of the restoration is not performed (the child has a panic fear to the drills).

We want to express our gratitude for the provided material to A.E. Anurova, T.F. Kosyreva, D.S. Roshchina, V.D. Shegoleva (Moscow)

Alternatives: Ionofil Molar AC Quick - Voco, Germany
ReLight tempo
Light-curing composite for temporary filling

Packaging:
paste LC - syringe (2,5 g),
flowable paste - syringe (2,5 g)
REF 020-03-2.5.1;
REF 020-03-2.5.2;
REF 020-04-2.5.1;
REF 020-04-2.5.2

Indications for use
- Temporary isolation of cavities during long endodontic treatment
- Temporary isolation during microprosthetics
- Temporary sealing of implant abutment screw
- Blocking concavity before impression taking
- Fixation of polymer matrix in the interdental spaces during the restoration

Advantages
- Saves time (curing time is 10-20 sec)
- Easy to use
- Tight marginal seal
- Withstands chewing load
- Easy to treat and polish
- Can be easily removed in one portion without drilling
- ReLight tempo of each consistency issued in 2 types:
  colourless (esthetic temporary restoration),
  colour (light visualization)

Flexible and reliable filling

Last generation elastomer provides best combination of viscoelasticity and strength properties of material. Light cure polymerization forms the stable 3-D net structure with “shape memory”
Low shrinkage of material allows decreasing the polymerization stress on the margin filling-tooth and avoiding the marginal gap appearance. Cured material is easy to remove by one whole portion with hand dental instrument without damaging of prepared cavity margin (even with the presence of overhang)

Comparative characteristics

<table>
<thead>
<tr>
<th>Physical and chemical properties</th>
<th>Material</th>
<th>ReLight tempo(^1) (TehnoDent, Russia)</th>
<th>Temp it(^2) (Spident, Korea)</th>
<th>Clip(^2) (Voco, Germany)</th>
<th>Requirements ISO 4049</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water solubility, µg/mm(^3)</td>
<td>1,1</td>
<td>5,66</td>
<td>0,46 %</td>
<td>≤ 7,5</td>
<td></td>
</tr>
<tr>
<td>Water absorption, µg/mm(^3)</td>
<td>10,3</td>
<td>35,98</td>
<td>—</td>
<td>≤ 40</td>
<td></td>
</tr>
<tr>
<td>Hardness (Shore A)</td>
<td>87</td>
<td>86(^1)</td>
<td>90</td>
<td>—</td>
<td></td>
</tr>
</tbody>
</table>

\(^1\) Inner research (ISO 4049) of TehnoDent research department

\(^2\) Manufacturer data (scientific information)

Alternatives: Clip - VOCO, Germany; Temp.it - Spident, Korea; Temp.it Flow - Spident, Korea
**ReLight**

Universal nano-hybrid light-curing composite material

Special set of fillings:
- Radiopaque barium boron aluminosilicate glass (0.02-2.0 µm);
- Nanoparticles of silicon oxide (5-20 nm);
- Aggregated particles of modified filler (0.4-1.0 µm), proportion of each filler, efficient combination of size and class of particles make a highly-filled composite material (80% mass), provide its mechanical strength and good polishing abilities.

**Indications for use**
- Restoration of all cavity classes according to Black
- Core Build-ups
- Splinting
- Correction of composite restorations
- Fabrication of indirect restorations (inlays, onlays, veneers)

**Advantages**
- Excellent polishing
- Do not stick to instrument
- Keeps stable at modeling
- Excellent radiopacity
- Fluorescence

**Physical properties**:

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compressive strength, MPa</td>
<td>390</td>
</tr>
<tr>
<td>Flexural strength, MPa</td>
<td>130</td>
</tr>
<tr>
<td>Flexural modulus, GPa</td>
<td>9.5</td>
</tr>
<tr>
<td>Diametral tensile strength, MPa</td>
<td>65</td>
</tr>
<tr>
<td>Water absorption, µg/mm³</td>
<td>3.5</td>
</tr>
<tr>
<td>Solubility, µg/mm³</td>
<td>0.17</td>
</tr>
<tr>
<td>Volumetric shrinkage, %</td>
<td>1.8</td>
</tr>
<tr>
<td>Radio-opacity, mm Al</td>
<td>3.5</td>
</tr>
</tbody>
</table>

Balance of particles size and disperse compound gives composite opalescence (visible light scattering) similar to tooth tissues and the ability to match with tooth colour (“chameleon” effect).
Rational and easy composite ReLight set of shades includes three subgroups of different transparency that allows to reach closest possible to natural teeth tissues colour at modeling.

ReLight composite samples, thickness 1,2 mm

**Transparent shades**
TC (translucent clear) for modeling of cutting edge and reaching optical “depth effect” at restoration.

**Universal shades**
A1, A2, A3, A3.5, A4, B1, B2, B3, C2 Possess average transparency/opacity between dentinal and enamel shades, depending on the thickness of material layer.

**Dentin-opaque shades**
OA2, OA3 Disguising shades for intensity restoration and covering of discoloration. Allow to cover dentin pigmentation and prevent translucent transillumination more than 0.5 mm.

Carefully balanced consistence of ReLight ensures modeling convenience and the ability to work in anatomically complicated tooth surfaces at restoration process. Material does not stick to the instrument, easily adjusts to cavity walls and remains stable while modeling.

Example of surface micro relief after exposure of 37C temperature during 20 minutes.

**Clinical case**
Single layer method of grinder teeth 3.7, 3.6 and 3.5 restoration with ReLight material universal color A2

We are thankful to Dental practitioner, orthopedist Mr. Korobeinikov P.I. for the details provided (ArtDentis Clinic, Moscow)

Alternatives: “Filtek Z550” - “3M ESPE” - USA
Endodontic materials

Antiseptic gel 2% chlorhexidine bigluconate
Antiseptic gel + M 2% chlorhexidine bigluconate, metronidazole

Packaging:
syringe (5 ml),
dispensing tips
REF 024-03-005;
REF 024-04-005

Indications for use
- Gangrenous pulpitis, chronic and acute periodontitis

Advantages
- Gel form with consistency easy to apply
- Easy to use with the help of syringe with flexible dispensing tips
- Active inhibition of the anaerobic flora of tooth root canals

Alternatives: Consepis - Ultradent, USA
Antiseptic liquid No. 1
2% chlorhexidine bigluconate

Indications for use
- Infected root canals treatment in case of pulpitis and periodontitis

Advantages
- Optimal concentration for dental root canals washing
- Convenient packaging for endodontic operations
- Available in pharmacies at any time

Antiseptic liquid No. 2
Sodium hypochlorite (3%; 5.2%)

Indications for use
- Infected root canals treatment in case of pulpitis and periodontitis

Advantages
- Effective antiseptics against infection
- Prolonged period of use thanks to impoved base
- You will use the medicine up to the very last drop thanks to original Luer Pro dosing system

Alternatives: Parcan - Septodont, France

Edetale liquid
Based on EDTA salts (20%), cetrimide

Indications for use
- Detection of root canal orifice
- Chemical enlargement of root canals when preparing to filling

Advantages
- Contains surface-active antiseptic agent enabling foam formation
- Fast penetration of a medication into the canals and microtubules by means of surface tension coefficient
- Convenient pipette

Alternatives: Canal-plus - Septodont, France
Edetale Gel
For orifice detection and chemical enlargement of root canals
Contains ethylene diamine tetraacetate salts (20%), cetrimide

Indications for use
- Detection and formation of root canals orifice
- Lubricating dental instruments at chemical and mechanical enlargement of root canals

Advantages
- Effective lubricant for endodontal instruments
- Fast penetration of a medication into the canals and microtubules
- Easily washed away with water

SEM image. The Chair of Therapeutic Dentistry. Omsk State Medical Academy, 2013

Tooth canal dentin of extracted tooth after instrumental treatment without using lubricant

Tooth canal dentin of extracted tooth after instrumental treatment using lubricant of TehnoDent Co ltd.

Alternatives: Flie-Eze - Ultradent, USA

Edetale Gel with peroxide
For orifice detection and chemical and mechanical enlargement of root canals
Contains ethylenediaminetetraacetic acid (17%) and peroxide (10%), cetrimide

Indications for use
- Detection and formation of root canal orifice
- Lubricating dental instruments at chemical and mechanical enlargement of root canals

Advantages
- Effective lubricant for endodontal instruments
- Excellent indication of canals cleanliness
- Fast penetration of a medication into the canals and microtubules
- Improving tooth colour and shine by endodontic whitening
- Easily washed away with water

Clinical indication for use
Active foaming: gel reaction, containing Edetale gel and peroxide, with solution of sodium hypochlorite, makes a foam because of active emission of chloride and oxygen.

Alternatives: RC-Prep - Premier, USA

Thank stomatologist-therapist, orthopedist P.Korobeinikov for the provided material (Clinic «Artdentis, Moscow)
**Cresotin liquid No. 1**

For antiseptic of tooth root canals
Based on camphor, chlorophenol and lidocaine hydrochloride(5%), eugenol

Packaging:
- bottle (15 ml) with a pipette-cap
- REF 015-01-015

**Indications for use**
- Pain relief and antiseptics in case of traumatic and acute pulpitis prior to pulp devitalization
- Pain relief in case of periodontitis

**Advantages**
- Immediate and reliable analgesic effect
- Strong antiseptic agent
- Does not cause irritation
- High penetration capability
- Convenient pipette

**Alternatives:** Pulperyl - Septodont, France

---

**Cresotin liquid No. 2**

For antiseptic of tooth root canals
Based on phenol, formic aldehyde (not less than 30%)

Packaging:
- bottle (15 ml) with a pipette-cap
- REF 015-02-015

**Indications for use**
- Infected teeth root canals in case of complicated pulpitis
- Treatment with the antiseptic agent during apicoectomy
- Infected root canals treatment in case of periodontitis

**Advantages**
- Strong antiseptic action
- Complete sterilization of teeth root properties
- Effective pain reduction, anti-inflammatory and anti-allergic action
- Convenient pipette

---

**The experience of clinical use of «Cresotin» antiseptic liquid No. 2 and «Eugetin» dental material for the filling of tooth root canals.**

Patient K., 37 years old complained on colour change of the 42-nd tooth.

Examination: In the area of distal contact of the 42-nd tooth a deep cavity filled with demineralised dentine was detected, probing of the bottom and walls of the cavity is painless, percussion is negative. Targeted intraoral X-ray image: the tooth has not been treated before, the root canal is radiotransparent. Periapical bone resorption with uneven, fuzzy outline. Therapy: tooth cavity exposed, mechanical and medicated treatment, canal treatment with Cresotin Liquid No. 2 and filling with Eugetin paste with slight overfilling the periapical destructive lesion.

Comparison X-ray image in 7 months after treatment:
Satisfactory results. The patient has no complaints.

*The Chair of Therapeutic Dentistry. Omsk State Medical Academy, 2013.*

**Alternatives:** Rockie’s - Septodont, France, Cresophene - Septodont, France
**Cresotin paste**

For antisepsic and filling of tooth root canals

Based on zinc oxide and zinc sulphate with the addiction of an antisepic agent

Packaging:
- dark glass jar (25 g)
- REF 015-03-025

**Indications for use**

- Filling infected and difficult root canals
- Filling canals with incomplete extirpation of pulp

**Advantages**

- Excellent flow property (23 mm)
- Low material solubility (1.5%)
- Strong antisepic and binding properties
- High radiopacity
- Effective pain reduction due to dexamethasone (0.01%)
- Easy paste infusion by means of root filler

Alternatives: Crescopate - Septodont, France

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**Devital**

For dental pulp devitalization

Non-arsenic paste

Contains polyoxymethylene (30%), Lidocaine hydrochloride

Packaging:
- syringe (2.5 g),
- plastic jar (5 g),
- dark glass jar (13 g),
- dark glass jar (20 g)
- REF 016-02-2.5
- REF 016-02-005;
- REF 016-02-013;
- REF 016-02-020

**Indications for use**

- Pulp devitalization before removal or amputation

**Advantages**

- Safe pulp devitalization
- Prolonged effect
- Painlessness of a procedure
- Effective pulp necrosis without arsenic
- Applicable for dentistry and paedodontics

Alternatives: Caustiner forte - Septodont, France; Depulpin - Voco, Germany
**Eugetin**

For filling root canals
Sealer, based on zinc oxide, calcium phosphate, eugenol, thymol iodide

**Packaging:**
- plastic jar (14 g), bottle with a pipette-cap (10 ml), measuring spoon, mixing pad
- REF 005-01-014.010

**Indications for use**
- Filling prepared root canals using gutta-percha points
- Filling root canals in particular medical cases without gutta-percha points

**Advantages**
- Significant periapical sensibility reduction (contains dexamethasone - 0.01%, hydrocortisone acetate - 1.00%)
- Easily mixed and remains flexible during 2-3 hours
- Strong bactericidal effect owing to thymol iodide
- Dense canals and microtubules filling (film thickness 3-5 μm)
- Low solubility (0.15%) guarantees a long service of root filling
- Radiopaque

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**Eugenol**

\[
\text{CH}_3\text{CH}=\text{CH}_2 + \text{ZnO} + \text{OH}_2 + \text{H}_2\text{O} \rightarrow \text{CH}_3\text{CH}=\text{CH}_2 + \text{Zn} \quad \text{O} \quad \text{O} \quad \text{O} \quad \text{CH}_3
\]

**Material film thickness 3-5 μm**

**Gutta-percha**

**Dentinal tubule 3-5 μm**

**Root canal**

**Root cement**

**Zinc eugenolate**

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**Experience of clinical use of Eugetin**

at root canal obturation together with gutta-percha

Patient Yu., 30 years old, complained on intermittent aching pain and pain when biting down on food in the area of 11th tooth. Retreatment of the 11th tooth root canal, followed by its obturation using the paste “Eugetin” and gutta-percha cones and root perforation filling with “Rootcement Quick-hardening” was provided.

*We are thankful to Dr. I. Ferman for the information provided.*

Alternatives: Endomethazeone - Septodont, France
Resortin
For treatment of narrow difficult infected root canals
Based on resorcin, formic aldehyde and zinc oxide, with whitening agent

Packaging:
glass jar (10 g),
bottle with a pipette-cap (5 ml),
bottle with a dropper-cap (5 ml),
measuring spoon, mixing pad
REF 007-010.005.005

Indications for use
- Treatment of narrow difficult infected root canals
- Antiseptic preparation and filling root canals with incomplete extirpation of pulp

Advantages
- Efficient antiseptic preparation of the dentinal tubules of root cement
- Safe root canals filling
- Optimal composition for dense canals filling
- Minimal colouring effect

Alternatives: Forfenan - Septodont, France; Foredent - Spofa Dental, Czech Republic

Cupratin
For treatment and filling of root of tooth. Powder
Based on alumocalcium silicates and copper-calcium hydroxide, the cement is formed by mixing with distilled water or a suspension No. 1 or No. 2.

Packaging:
dark glass jar (10 g),
measuring spoon,
mixing pad
REF 008-03-010

Indications for use
- Final canal filling after any root treatment

Advantages
- Long-setting
- Long term bactericidal effect
- Osteoplastic properties and effective hard tissue regeneration
- High ductility at mixing
- Dense filling of root canals
- Low solubility (0.5%)

Alternatives: Atacamil - Humancemie, Germany

Iodotin
For treatment of pulpitis and all forms of periodontitis. Paste in jar
Based on iodoform, chlorophenol, camphor

Packaging:
dark glass jar (25 g)
REF 003-01-025
REF 003-02-025

Indications for use
- Treatment of pulpitis
- Treatment of granulomatous and granulating periodontitis with a fistula

Advantages
Iodotin non-hardening paste
- Strong and prolonged bactericidal effect
- High radiopacity
- Easy to use and highly effective

Iodotin hardening paste
- Dense filling of root canals
- Ideal for gutta-percha filling
- High radiopacity

Alternatives: Tempohore - Septodont, France
Calcetin
Endodontic paste
Paste based on calcium hydroxide
For temporary filling

Packaging:
syringe (2 g),
syringe (2 x 2 g),
dispensing tips
REF 004-03-002,
REF 004-03-004

Indications for use
- Irreversible pulpitis
- Conservative treatment of all forms of chronic periodontitis
- Apexification and apexogenesis

Advantages
- Superior antibacterial effect (pH 12.8) and radiopacity
- Providing conditions for tooth root growth and formation
- The paste is easily removed from the canals if necessary
- Syringe with reinforced plunger, comfortable grip and Luer-Lock, pleasant to work with
- Ultra-thin dispensing tips (0.52 mm with a gauge 22) allow paste infusion into the canal directly

Alternatives: Metapaste - Meta Biomed, South Korea

Iodotin paste
For treatment of pulpitis and all forms of periodontitis. Paste in syringe
For temporary filling
Based on iodoform and calcium hydroxide

Packaging:
syringe (2 g),
syringe (2 x 2 g),
syringe (2 x 3.5 g)
dispensing tips
REF 003-03-002,
REF 003-03-004,
REF 003-03-007

Indications for use
- Chronic and all destructive forms of periodontitis
- Root apexification in case of periodontitis
- Infection of root perforations and fractures
- Primary teeth canals filling

Advantages
- Intense antiseptic properties (contains iodoform)
- High pH value (12.8), enabling prompt, persistent and durable bactericidal effect in treatment of infected canals as well as in periapical area (99% of bacteria are killed within 48 hours after the root canals filling by the paste)
- The paste is easily removed from the canals if necessary
- Stimulates hard tissue formation on apex level
- Syringe with reinforced plunger, comfortable grip and Luer-Lock, pleasant to work with
- Ultra-thin dispensing tips (0.52 mm with a gauge 22)

Alternatives: Metapex - Meta Biomed, South Korea
Rootdent
Root canals repair product
Based on calcium, silicon, aluminium oxide (MTA), zirconium oxide

Packaging:
20 doses 0.25 g each
10 doses 0.25 g each
5 doses 0.25 g each

Advantages
- Hardens in presence of moisture and blood
- Controlled setting time
- High mechanical resistance
- Excellent biocompatibility
- Low solubility
- High alkalinity and microbicidal activity

Characteristics

<table>
<thead>
<tr>
<th></th>
<th>Rootdent</th>
<th>Rootdent (quick-setting)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial setting time</td>
<td>4 hours</td>
<td>10-12 minutes</td>
</tr>
<tr>
<td>Compression resistance, MPa</td>
<td>40±2</td>
<td>45±2</td>
</tr>
<tr>
<td>Solubility, %</td>
<td>0.70</td>
<td>0.58</td>
</tr>
<tr>
<td>pH value</td>
<td>12.8</td>
<td>12.8</td>
</tr>
</tbody>
</table>

Sealing capacity:

Dentine caries
Tooth cavity bottom and walls perforation
Internal and external root resorption
Apexification and apexogenesis

Rootdent Clinical Application Area

Accidental pulp exposure biological method of pulpitis treatment in case of intravital pulp amputation of primary teeth
Apicoectomy and retrograde root canals filling

Experience of Clinical Use of Rootdent during Apicoectomy and Retrograde Filling

Pic. 1 Patient C., 19 years old: radicular cyst of the maxilla next to the 21-st, 22-nd teeth
Pic. 2 Apicoectomy of the 21-st and the 22-nd tooth: cyst enucleation
Pic. 3 Retrograde filling the 21-st and 22-nd tooth canals with Rootdent
Pic. 4 Patient C., 19 years old: in 6 weeks after the surgery: features for hard tissue regeneration and decrease of the defect size, apical fillings are maintained and definable in X-ray image.

Epoxidin
For filling of root canals
Sealer, based on epoxy-amine resin

Packaging:
yellow paste (tube, 4 ml),
white paste (tube, 4 ml)
REF 017-01-004.004

Indications for use
- Filling teeth root canals using gutta-percha points, as well as silver and titanium posts

Advantages
- Excellent flow property
- Service durability
- Reliable sealing
- Does not contain urotropin
- Does not bring pain on after filling

Film thickness - 5 μm;
Appropriate flow property - 25 mm
allows the material to penetrate to and fill area in-between the points and root canal walls, securing firm adherence of points and density of root filling

Low solubility - 0,1%
30 times lower than requirement of ISO 6876 (clause 4.8)

Epoxidin does not contain urotropin. The sealer hardening does not cause toxic gas emission and exothermic effects in the root filling, allowing to maintain stability of the material volume, preventing from pains after filling

- Excellent sealing capacity
- Durable results

*The information was kindly provided by the Chair of Therapeutic Dentistry of Omsk State Medical Academy, 2014

Medical case*

Patient S. 38 years old woman
Diagnosis: chronic periodontitis of the tooth 45 in the process of the treatment in the tooth 45 was revealed 2 root canals. Thermoplastified gutta-percha was used with the material Epoxidin at the stage of obturation.

Photo 1. Tooth 45 before the treatment
Photo 2. Tooth 45 just after the treatment
Photo 3. Tooth 45 after 6 month after the treatment

*We want to express our gratitude for the provided material to Leosh A. E. and Illyn M.V. (OOO «Stomatologiya LEOSH» Syktyvkar)

Alternatives: AH Plus - Dentsply, USA
Poliren Polishing Paste No. 3
Contains abrasive material (corundum),
fraction: 3-5 μm

Packaging:
syringe (8 g),
jar (45 g),
tube (50 ml)
REF 014-03-008;
REF 014-03-045;
REF 014-03-050

Indications for use
- Polishing of composite and glass ionomer fillings

Advantages
- High-quality treatment of fillings
- Easy to use
- Easy to wash away with water
- "Dry" shine effect

Alternatives: Super Polish - Kerr, USA
Travlin
Gel for etching
Includes orthophosphoric acid (37%), chlorobutanol (active antiseptic agent)

Packaging:
syringe (5 ml), syringe (10 ml), dispensing tips
REF 012-01-005; REF 012-01-010

Indications for use
- Enamel and dentine etching according to acid etching technique

Advantages
- High color contrast for application control
- Optimal consistency for targeted application
- Fast removal of a smear layer
- Easy to completely wash away with a stream of water and air
- Easy to use

Gel consistency is the critical factor in hard tooth tissues etching with orthophosphoric acid

Applied on vertical surface

Travlin, TehnoDent
Alternative competing product

37°C

Etching time
30-60 sec.

Travlin, TehnoDent
Alternative competing product

Comparison of the pictures shows that Travlin gel has optimal consistency, which enables targeted application and effect on a surface designated for etching without displacement and leakage from the surface during the etching time.

Practical use*

Photo 1. Initial situation

Photo 2. Etching of prepared tooth surface was made by «Travlin» gel

Photo 3. The surface became matte

Photo 4. The finished result of the restoration

We want to express our gratitude for the provided material to Leosh A.E., Illyn M.V.
(ООО «Стоматология ЛЕОС» Сыктывкар) and Parhachev M.N. (ООО «Дент-Мастер» Сыктывкар)

Alternatives: Vococid - Voco, Germany
Hemostop gel
For gingival retraction and hemostasis
Based on aluminium chloride (25%), cetrimide

Packaging:
syringe (5 ml),
dispensing tips
REF 023-02-005

Indications for use
- Gingival capillary bleeding
- Gingival leakage
- Gingival retraction for impression taking and cervical caries treatment
- Treatment of dental root canals in case of apical bleeding

Advantages
- High-efficient hemostatic and binding agent
- Immediate retraction with a prolonged effect (20-30 min.)
- Easily washed out with a jet of water
- Does not paint contacting tissues and materials
- Easy to use with the help of syringe with flexible dispensing tips

CoaguloGRAM shows, that at the moment of adding of the hemostatic gel of company TehnoDent to the blood sample, during 15 minutes appeared the clot, that is 4 time faster in comparison with the analogue competitive products.

Alternatives: ViscoStat Clear - Ultradent, USA
Desensetin gel
For topical anesthesia
Contains lidocaine hydrochloride (15%), cetrimide

Immediate and durable effect!
- Packaging: jar 30 ml (35 g)
  REF 010-01-030
- Flavours on your choice:
  - Wild berry
  - Tropic
  - Citrus
  - Mint

Pain relief
- Of mucous tunic prior to injection
- Of soft tissues in case of subgingival dental deposits removal
- Of tissues in case of minimally invasive surgeries in the oral cavity
- In case of primary teeth removal, in case of teeth eruption, and vomiting reflex suppression
- In treatment of stomatitis, erosive and ulcerative lesions of oral mucous tunic

Advantages
- Ultrafast effect (10-15 sec.) on receptors in the application spot
- Easy to apply on mucous tunic
- Secures painlessness of procedure within 20 minutes
- 4 Pleasant flavours + neutral

Effect on patients of different age groups:

0.05 g (about a wheat grain size) of the medication was used in the study. The dose allows to cover an area equal to 4 sq. cm.

* the dose was decreased 3 times in kids
In independent studies of I. Ferman, Dentist

Desensetin liquid
For topical anesthesia
Contains lidocaine hydrochloride (10%), cetrimide

Packaging:
- spray bottle (15 ml/50ml)
  REF 010-02-015;
  REF 010-02-050

Indications for use
- Injection site anesthesia
- Anesthesia in case of minimally invasive surgeries in the oral cavity
- Gag reflex elimination
- Applicable for paedodontics

Advantages
- Convenient attachment
- Time saving: it is possible to shorten three-stage anesthesia method to two stages

Important information
- One pump press sprays 0.12-0.15 ml of liquid
- Topical anesthesia occurs in 10 seconds
- At a distance of 1 cm of the surface one pump press processes (25x25) mm² area; in case of spraying near the surface - (10x10) mm²

1 stage. Application of anesthetic spray Desensetin on the place of the future needle injection

2 stage. Submucosal injection of the anesthetic solution
3 stage. Submucosal injection of the anesthetic solution

3 = 2

Alternatives: Xylonor gel - Septodont, France
Dehydrating and degreasing liquid
Based on propanol, isoamyl acetate

Packaging:
bottle (15 ml, 30 ml)
REF 001-01-015;
REF 001-01-030

Indications for use
- Dehydrating and degreasing of root canals and carious cavities
- Treatment of teeth prepared for crowning prior to the denture fixing

Advantages
- Fast and effective surface dehydrating
- Complete dehydrating of hard tissues
- Does not contain diethyl ether
- Economic use

Laboratory research of TehnoDent Company

Pic.1 Dentin of extracted tooth root canal after washing out of hydrophobic paste (calcium hydroxide in silicone) without using Liquid for Dehydrating and Degreasing

Pic.2 Dentin of extracted tooth root canal after washing out of hydrophobic paste (calcium hydroxide in silicone) with the use of Liquid for Dehydrating and Degreasing

Alternatives: Hydrol – Septodont, France

Hemostop
Liquid for gingival retraction and hemostasis
Based on aluminium chloride (25%), cetrimide

Packaging:
bottle (15 ml)
with a pipette-cap
REF 023-01-015

Indications for use
- Apical bleeding
- Gingival leakage
- Gingival retraction

Advantages
- Instant hemostasis: blood clot formation within 10 seconds
- Effective and long-lasting retraction
- Does not paint contacting tissues and materials
- Has antiseptic effect (contains cetrimide)

Alternatives: Racestyptine - Septodont, France
GlassyCem Conditioner
Based on polyacrylic acid

Packaging:
dropper-bottle (5 ml)
REF 021-03-005

Composition
- Water solution of polyacrylic acid

Advantages
- Conditioning of the surface improves adhesion on 30% and ion-exchange between tooth structure and glass-ionomer cement.
- High adhesion has not weakened over time, due to the chemical bond of polyacrylic acid with calcium of enamel and dentine.
- Blue colour provides the control of laying.
- Eliminates smear layer.
- Keeps dental tubules closed, reduces the risk of sensitivity occurrence.

SEM photo of specific dental tubule after conditioning during 10 seconds in a 10% solution of polyacrylic acid.
Dentine tubule is almost completely closed. Flowage of dentine liquid and acid influence on the pulp is minimal.
(Graham J. Mount Atlas of Glass-Ionomer Cements* 2002)

Alternatives: GC - CAVITY CONDITIONER, DENTIN CONDITIONER, Japan

GlassyCem Varnish

Packaging:
dark glass bottle with a dropper cap (5 ml)
REF 021-04-005

Composition
- Contains filming agent in easily volatile solvent.

Advantages
- Safety thin film isolates filling from influences of saliva at the initial stage of its development, normalizes the water balance of the ion-exchange reaction.
- Normalization of the water balance of the ion-exchange reaction.
- Finishing varnish gives the restoration aesthetic shine.

Alternatives: GC - Fuji Varnish, Japan
Hemostop-A
Paste with iodoform for socket treatment

Packaging:
dark glass jar (25 g)
REF 023-07-025

Indications for use
- Non resorbable temporary filling
- Socket filling after tooth extraction
- Post extraction complications prophylaxis
- Acute alveolitis treatment

Advantages
- Fast and prolonged analgesic effect
- Strong antiseptic
- Fast hemostasis and blood clots formation
- Good consistency – fibrous easy forming paste
- Fast wound healing
- No need to remove the paste from socket (gradually washing)
- Do not hurt oral mucosa

Hemostop-A contains active components, providing long-term therapeutic effect:
- iodoform is an antiseptic, possessing prolonged antibacterial effect
- eugenol enhances antiseptic effect
- lidocaine reduces pain by its analgesic effect on tissues for several hours
- calcium containing filling component promoting formation of primary osteoid in the socket/

Method of use:
- roll a ball from the paste and insert it into tooth socket
- warn the patient not to rinse the wound after tooth extraction and paste inserting!

Alternatives: Alvogyl - Septodont, France
More than 55 countries and 550 dealers

Dentists all over the world use materials of company TehnoDent
We make the work of practitioner dentists more successful, easy and safe, that allows the patients to stay healthy, happy and thankful

Yours sincerely, TehnoDent team
New materials appear throughout the year.

To stay up-to-date on the latest products,
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or contact us by phone number  +7-4722-20-28-94, 20-28-95
You may also send message to zakaz@tehnodent.org