SULFACRYLAT - A MEDICAL ADHESIVE FOR SURGERY

Description
The Institute of Catalysis, Siberian Branch of the Russian Academy of Sciences, jointly with the Institute of Chemistry of the Ufa Center of Sciences, RAS developed Sulfacrylate, a new medical cyanacrylate adhesive composition for joining living body tissues, which includes plasticizing, anti-inflammatory and antibacterial components. In contact with living tissues and aqueous solutions, the adhesive composition polymerizes in 10-120 sec. The polymeric film resolves within 30-40 days. Use of the adhesive to fix the wound edges facilitates surgical handling and ensures reliable peritonization and sealing of suture lines.

Application of Sulfacrylate in a surgical operation

Technical appraisal and economic benefits
- Close affinity to living tissues;
- a high germicidal and hemostatic effect;
- a reduction in the time of healing of surgical wounds;
- a combination of the required strength and elasticity.

Application areas
The adhesive is used in pediatric and cardiovascular surgeries, cerebrovascular microneurosurgery, gastrointestinal and respiratory surgeries, ophthalmology, obstetrics, gynecology, sports medicine, etc. Sulfacrylate can be employed to stick materials in housekeeping and industry and as a biologically stable coating and a heat-resistant organic substrate.

Development stage
Sulfacrylate was tested in 15000 surgical operations. Sulfacrylate was permitted for industrial production and wide application in medical practice by the decision of the Committee on New Medical Engineering of the Ministry of Health of the Russian Federation of 21.01.99. Industrial production was launched in Biisk.

Patent situation
A patent was granted in the Russian Federation (1999); a trademark certificate is available (2001).

Commercial offers
Sale of a production license.
Joint production and marketing.
Delivery of the adhesive.
*Estimated cost*
To be negotiated

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