A BIOCOMPATIBLE ADHESIVE COMPOSITION THAT ACCELERATES WOUND HEALING AND PROVIDES TISSUE ADHESION



Description of the Invention

The invention relates to a biocompatible, in situ gel-forming tissue adhesive composition that strongly adheres to tissue and is used for wound closure, tissue repair and regeneration.



Applicant

Mplusheal Biyoteknoloji A.Ş.



Inventor

Rümevsa Tutar

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Advantages

- Integrates with tissue by providing high biocompatibility and carries no risk of cytotoxicity.
- Unlike traditional adhesives, it creates a microenvironment that supports cell migration, proliferation, and regeneration, thus actively contributing to the healing process.
- The invention offers a tissue adhesive composition that can be applied without damaging the tissue and does not require light, heat, or toxic cross-linkers, presenting a non-invasive, practical and patient-comfort-enhancing treatment approach.
- The composition allows direct application to the wound area using a syringe, spray device, or drop method, providing ease of use.

Market Information

The global market size for hemostasis and tissue sealant products was reported at USD 8.6 billion in 2024. The tissue sealant and adhesive market related to this invention is expected to reach USD 4.6 billion by 2035 with an annual growth rate of 6.4%.

Target Audience

This invention is intended primarily for companies operating under the specified NACE codes, as well as enterprises engaged in medical product manufacturing.

Application Areas

The invention is suitable for use by medical device manufacturers, biomaterial companies, businesses operating in regenerative medicine and medical product manufacturers.

Nace Code	Activity
32.50.02	Manufacture of prostheses, orthopedic devices and accessories used in medicine, surgery and dentistry
46.18.03	Activities of intermediaries involved in the wholesale of medical products, instruments and materials

Expectation

The aim is to transfer the technology to target companies through patent licensing. This technology transfer will be supported by industry-to-industry collaboration projects.

It is eligible under TÜBİTAK 1702 - Patent-Based Technology Transfer Support Call.

In the case of a technology transfer, since the customer company qualifies as an SME, it will be able to reclaim 25%-40% of the licensing fees paid.

