

POLYFUNCTIONAL POLYURETHANE MATERIALS FOR BONDING AND COATING OF DIFFERENT TYPES OF SURFACES

Areas of Application

The polyfunctional polyurethane materials (PPM) based on single synthetic model with the use of renewable raw materials are used to ensure durable bonding of different materials and to protect different types of surfaces (metal, concrete, brick, wood) from destruction under the action of (a)biotic and anthropogenic factors

Specification

The polyfunctional polyurethane materials are water-, oil-, benzo-, and lightproof, bio-, wear-, and chemical-resistant.

Adhesive bond strength, MPa	22–35
Cohesive strength, MPa	41.5–46.0

Advantages

There are no domestic counterparts. The advantages of the offered materials, as compared with the foreign analogs, are as follows: long-term comprehensive protection of materials, structures, and infrastructure facilities from destruction; guaranteed continuous service of facilities for 10–15 years after repair

Stage of Development. Suggestions for Commercialization

IRL6, TRL5

Manufacture of a wide range of polymer materials for various purposes according to customer requirements; seeking investors for industrial production

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Steel to steel adhesive bonding



Uncoated sample



Coated sample in 1 year

IPR Protection

IPR1, IPR3