

Fields of Application

In the mining industry:
 - sealing of cracks and fractures in stoppings and in rock mass near stoppings,
 - sealing for protection against water outflow and air migration,
 - consolidation and reinforcement of roofs, floors and side walls of dog headings and mining pits,
 - stabilisation of coal with propensity for coming off the side wall.
 The system can be used in poorly and heavily loose, dry, damp, wet and heavily flooded rocks and coal.
 In the construction industry and tunnelling technology, to perform other works where materials with such parameters need to be used.

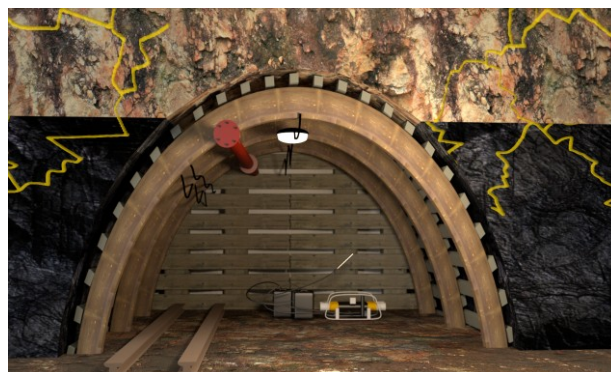
Advantages

The adhesive penetrates even the smallest rock mass cracks and fractures. By penetrating crevices, it restores the interlayer friction connection and bonds rock mass layers. Polyurethane adhesives are characterised by the following properties:
 - good adhesion to rock and coal, even in water-flooded environment,
 - high mechanical strength on considerable elasticity,
 - economic application owing to foamability;
 - good penetration properties owing to low viscosity and the supporting effect of foaming pressure,
 - it does not lead to elastic energy accumulation;
 - resistance to water and ageing after solidification.

Product characteristics

The polyurethane adhesive is developed through a chemical reaction occurring after both components, Erkadol® and Erkadur®, are mixed together.
Erkadur – hardening agent for the polyurethane adhesive, common to the entire system of resins; it comprises polyisocyanate (MDI) with additives and modifying agents.
Erkadol - polyurethane adhesive resin, a special polyol mixture, which is dosed with additives to meet the required specifications.

Resin	Erkadol A	Erkadol K	Erkadol M	Erkadol L
Destination	Used to seal and consolidate water-bearing rock zones and secure mine headings against water or gas penetration.	Quickly increasing viscosity results in instantaneous closing of gaps and cracks in the rock mass. The system is particularly useful for strengthening highly loose rock mass	Allows for an extensive penetration area and reduced risk of the adhesive flowing out of the rock mass. It is multi-task resin convenient to use.	Prolonged reaction time; it maintains the intrinsic viscosity for an extended period, thus having an extensive penetration area around the bore hole.
Reaction time	1 min	3 min	9 min	25 min



Method of use:

The application of the adhesive involves mixing in the application site both components Erkadol and Erkadur in the proportion of 1:1 and pumping with an injection engine to the holes made in the rock mass. As a result of the setting reaction, a finished product is made.

Product durability and storage:

Supplied in canister-type plastic or metal containers or in barrels. Each component in a separate container. Store in storage facilities intended for chemical products. Storage at negative temperatures does not affect the quality of components. In the event of freezing, induce defrosting and stir before application. The guaranteed durability is 12 months of the manufacture date on condition that the product is stored according to the instructions.

Information on safe use:

It meets hygienic requirements and the requirements of the Polish and European Union laws on marketing, also for materials intended for use in underground workings of mining companies, in non-methane and methane spaces included in the explosion risk "a", "b" or "c" degree and dust coal explosion risk class A or B.

- The components of adhesives in the Erkadur®/Erkadol® system are not hazardous materials within the meaning of the transport regulations RID/ADR, ADR/RID, IMDG, ICAO/IATA

Additional information: Irritating to eyes and skin. Protect against temperatures below 0°C. Avoid temperatures over +50°C.