TECHNICAL DATA SHEET

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Letoxit® PL 60

Description
Letoxit PL 60 is a two-component, high-strength, paste epoxy-based adhesive curing at room temperature. It is designed to adhesive bond a variety of metallic materials, honeycombs, fiber-reinforced composites, wood, rubber and glass. Such materials can be even combined and bonded to one another. Bonded joints exhibit very good mechanical properties at temperatures ranging from –75°C to +60°C. The adhesive contains a corrosion inhibitor.

Appearance
A Component: thixotropic paste of yellow color
B Component: fluid of blue to purple color

Mixing
Mix 100 weight parts of A component with 41 weight parts of B component, mix thoroughly until an even colour shade is achieved. Also an automatic mixer can be employed. To guarantee maximum strength of the bonded joint, the accuracy of ± 5% must be kept for B component.

Pot life
Considering exothermic reaction of both components after mixing, pot life of the mix depends on weighed amounts, mix temperature and used container. Approximately it can be said that pot life amounts to

2 hours	for 50g of mix	at 25°C
1 hour	for 100g of mix	at 25°C

Surface treatment
Surfaces to be bonded must be free from any mechanical impurities and traces of oil or grease and must be dry. Surface pretreatment of parts to be adhesive bonded is a decisive factor affecting strength of the bonded joint. Some materials require special surface pretreatment techniques.

Adhesive application
Apply the adhesive to both surfaces to be bonded using a spatula, brush, or pressure gun. Optimum strength of the bonded joint can be achieved at joint thickness of 0.1-0.2 mm, i.e. if amount of approximately150g/m^2 is applied.

Curing
In 4-5 hours after mixing both components a gel is formed at 25°C, and after 24 hours the bonded parts can be handled. 90% of final strength of the adhesive is achieved after 4 to 5 days. Full strength is achieved within 1 to 2 weeks at room temperature. It is possible to accelerate the curing cycle by increase of temperature. In such case, full strength can be achieved in 4 hours at curing at 50°C, or even in 1 hour at 120°C.

Properties of cured bonded joint

	loading temperature	Strength
Shear strength at tensile loading according to CSN 66 8510 standard	+20°C	30-35 MPa
Peel strength according to CSN 66	+20°C	3-6 N/mm

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8516 standard		
Glass transition temperature (according to PN-5M-42, DSC), cured 24h 25°C, post-curing 4h at 80°C		58 °C

Packing:
The adhesive is supplied in pack size of 1.45 kg and its multiples. The A component is packed in cans or polyethylene containers; the B component comes in polyethylene bottles in a corresponding ratio.

Storage:
Both components of the adhesive should be stored in sealed containers in dry places, apart from each other, at temperatures ranging from +10°C to +25°C. Protect from direct sunshine. At 20°C, minimum shelf life is one year.

Disposal of leftovers and containers
Leftovers of prepared and not used mix should be cured, leftovers of A component should be mixed with leftovers of B component and also passed to be cured, best in original containers. Cured adhesive is not hazardous and can be disposed of along with municipal waste. Based on Waste Act, leftovers of separate components are classified as hazardous waste and are disposed of by incineration in special plants designed for such purposes.

Safety during processing:
see Safety sheet

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