# TECHNICAL DATA SHEET

Version: 12th September 2011 Letoxit® LH 190

# **Description**

two-component epoxy adhesive hardens at higher temperature. It is composed from part A and part B. It has good temperature resistance. The adhesive is determined for bonding of metals and applications with high temperature resistance.

#### Method of use

# Mixing

mass ratio: 100 parts of A: 52 parts of B
 volume ratio: 100 parts of A: 50 parts of B

## **Application**

The adhesive is prepared for application by mixing A and B components in 100:52 weight ratio or 100:50 volume ratio. It is necessary well mixing up especially along the vessel walls and bottom.

#### Pot-life

Pot-life depends on the weighed amount, on the mixture temperature and the vessel used. Approximate life of 100 g mixture at 20 °C is 120 minutes.

# Preparation of materials for gluing

Both the bonded surfaces must be clean, dry and free from any grease and dust. Some materials require special treatment.

### Curing

At the temperature of 25 °C, Letoxit® LH 190 needs 24 hours to achieve sufficient strength for manipulation. For final strength it must be hardening at higher temperature. After obtaining sufficient strength for manipulation (at 25 °C) is recommended to cure gradual increase in temperature, as follows:

60°C/30 min 100°C/60 min 120°C/180 min

### **Technical data**

## A. Properties LH-190 (part A)

Properties of uncured resin

Properties Norm (method)

Colour visual yelowish tixotropic liquid

Density ISO I675 /SN 656l99/ 1,05-1,10 g/cm<sup>3</sup> Epoxy equivalent PN-5M-20 0,9-1,1 mol/100 g

B. Letoxit LH-190 (part B)
Properties of curing agent

Properties Norm (method)

Colour visual colourless liquid Density ISO I675 /SN 656l99/ 0,95-1,0 g/cm<sup>3</sup>



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Amine number PN-5M-06 min. 650 mg KOH/g Viscosity (20°C) PN-5M-01 100-200 mPa.s

C. Properties of cured bonded joint

Shear strength CSN EN 1465 16 MPa  $T_{\alpha}$  (max) DSC 200 °C

# **Packaging**

Letoxit LH 190 part A: 1, 5, 10 kg drum (and cartridges)

part B: 520 g, 2,6 kg, 5,2 kg drum (and cartridges)

# **Storage**

#### Part A

Part A should be stored in sealed containers in dry, cold and well wentilated places, at temperature to +8°C. Minimum shelf life at the temperature +8°C is 6 months.

#### Part B

The curing agent (part B) should be stored in sealed containers with minimum air exchange. Minimum shelf life at the temperature from +5 to +35°C is six months.

# 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 Material Safety Data Sheet

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