

Technical Data Sheet

**LOXEAL 30-55** 

#### Registered Quality and Environment Management System Company

## Description

Loxeal 30-55 is a structural acrylic adhesive to be used with its specific Loxeal Activator, designed primarily for bonding metal to metal, ferrite, ceramics and some thermoplastics. This adhesive may be used in a variety of structural bonding applications due to its versatile capabilities. Structural adhesive 30-55 provides high tensile strength while maintaining excellent product flexibility; this results in tough and durable bonds with outstanding impact and peeling resistance. Curing is effected in few minutes at room temperature.

# **Physical properties**

Base resin : Modified acrylic Appearance : amber-like

Viscosity (+25°C - Pa s)

- spindle 7 @ 20 RPM : 50 - 120 - spindle 7 @ 2,5 RPM : 30 - 60 Specific gravity (25°C) : 1,0 g/ml Flash point, TCC : +87°C

Shelf life: 1 year (max storage temp. +25°C) in original

unopened packaging.

# **Curing properties (typical)**

Ref.: Activator 20

Fixture time with @ +20°C.:

 Gap 0,05 mm :
 < 2 min.</td>

 Gap 0,25 mm :
 10 min.

 Gap 0,50 mm :
 20 min.

 Functional strength :
 30 - 60 min.

 Final strength :
 24 hours

**Heat cure** 

Heat can be used to perform the curing when surfaces conditioning with primer (Activator 20) is not desiderable. Typical heat curing conditions consist of heating parts and maintaining the bond line at temperature given below for the time specified. Optimum conditions for heat cure should be determined on actual assemblies.

## Properties of cured adhesive (typical value)

Ratio of use Adhesive/Activator : 100 :10 not critical Shear strength (ISO 4587) : 12 - 25 N/mm² Tensile strength (ISO 6922) : 15 - 25 N/mm² N/25mm Impact strength (ASTM D-950) : 15 - 25 kJ/m² Coefficient of thermal expansion (ATM D696) : 80 x10  $^{-6}$  1/K Thermal conductivity (ASTM C277) : 0,1 W/mK

Dielectric constant (ASTM D150): 4,6 Mhz
Volume resistivity (ASTM D257): 2.10<sup>13</sup> Ohm.cm
Dielectric strength (ASTM D149): 30 - 50 KV/mm
Temperature resistance: -40°C /+120°C.

#### Directions for use

Clean and degrease surfaces to bond with Loxeal Cleaner 10. Apply enough product on one surface and apply Loxeal Activator on the other surface. Put together surfaces and put pressure unitl adhesion is reached. Clean the excess of product with organic solvent. For gaps over 0,50 mm put Loxeal Activator on both surfaces. Wait 24 hours to put pieces under stress conditions.

### Storage

Keep product in a cool and dry room at no more than +25°C. To avoid contaminations do not refill containers with used product. For more information on applications, storage and handling contact Loxeal Technical Service

## Safety and handling

Consult Material Safety Data Sheet before use.

#### Note

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