

Registered Quality and Environment Management System Company

# Technical Data Sheet LOXEAL 18-10 PIPE SEALANT

## **Description**

Anaerobic adhesive for sealing of metal thread pipe joints. Suitable for gas, LP gas, compressed air, gasoline and oil, industrial fluids, CFC, potable water and several chemicals. Low friction coefficient will assure easy assembly. Thixotropic property prevents migration from thread of the sealant before or during curing. It replaces P.T.F.E. tape and yarn. Cured product provides elastic film. Shocks and vibrations resistant; uneffected sealing properties in the temperature range from -55 to +150°C. Easy dismantling is assured even after years.

Approvals for natural gas and LP gas in vapour state

Europe: approved to EN751-1 by DIN-DVGW NG 5146AR0574 from -20°C to +150° C up to 2" pipe size.

Australia: approved by AGA n.5047 up to 5 bar and 2" pipe size.

### **Physical properties**

Composition: anaerobic methacrylate

Colour: white

Fluorescence: under blue light Viscosity (+25°C - mPa s): 17.000 - 70.000 thixo

 $\begin{array}{lll} \mbox{Friction coefficient $\mu$:} & 0.10 \\ \mbox{Specific weight (+25°C - g/ml) :} & 1,05 \\ \mbox{Max diameter of thread/gap filling :} & 2" - 0,30 \ mm \\ \mbox{Flash point :} & > +100°C \\ \end{array}$ 

Shelf life +25°C: 1 year in original unopened packaging

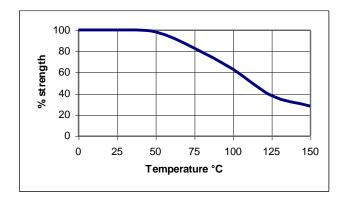
### **Curing performance**

Curing rate depends on the assembly clearance, material surfaces and temperature. Functional strength is usually reached in 1-3 hours and full curing takes 24-36 hours. In case of passive surfaces and/or low temperature a fast cure can be obtained using Loxeal activator 11.

#### **Environmental resistance**

The graph below shows the mechanical strength vs. temperature.

Steel specimen - ISO 4587



## **Curing properties**

Bolt M10 x 20 Zn - quality 8.8 - nut h = 0.8 d at +25°C Handling cure time: 20 - 40 minutes 1 - 3 Functional cure time: hours Full cure time: 5 - 10 hours Shear strength (ISO 10123): N/mm<sup>2</sup> 4 - 6 Tensile strength (ASTM D-2095): 3 - 5 N/mm<sup>2</sup> Elongation at break: over 100%

Locking torque (ISO 10964)

### **Chemical resistance**

Aged under conditions below after 24 hours from polymerisation at indicated temperature.

Substance	°C	Resistance	Resistance	Resistance
		after 100 h	after 1000 h	after 5000 h

Motor oil	125	discrete	discrete	discrete
Gear box oil	125	discrete	discrete	discrete
Gasoline	25	excellent	excellent	excellent
Water/glycol 50%	87	excellent	good	slight
Brakes oil	25	excellent	excellent	excellent

For information on resistance with other chemicals, contact Loxeal Technical Service

#### Directions for use

The product is recommended for use on metal surfaces. Clean and degrease parts before bonding with Loxeal Cleaner 10.

Apply product to fill completely the gap, assemble parts and hold on for curing time. Liquid product can damage coating, some plastics and elastomers and late stress-cracking events might be induced if used with some thermoplastics.

For application on non metal materials, contact Loxeal Technical Service. For disassembly, use normal tools and eventually heat pieces at +150°C/+250°C, remove any residue of cured product mechanically and clean parts with Acetone.

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### **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 further 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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