

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
Friction coefficient μ :	0.10
Specific weight (+25°C - g/ml) :	1,05
Max diameter of thread/gap filling :	2" - 0,30 mm
Flash point :	> +100°C
Shelf life +25°C :	1 year in original unopened packaging

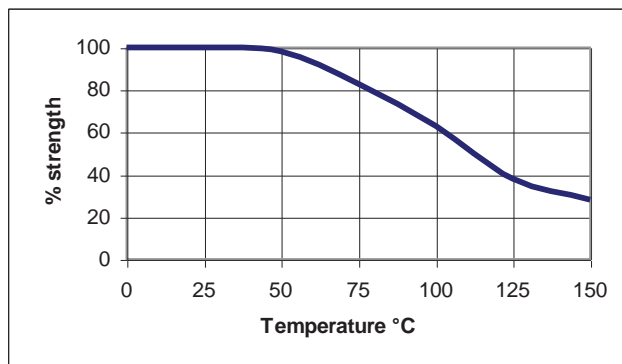
Curing performance

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
Functional cure time :	1 - 3 hours
Full cure time :	5 - 10 hours
Shear strength (ISO 10123) :	4 - 6 N/mm ²
Tensile strength (ASTM D-2095) :	3 - 5 N/mm ²
Elongation at break :	over 100%
Locking torque (ISO 10964)	
breakaway :	6 - 11 N m
prevailing :	2 - 5 N m
Temperature range :	-55°C/+150°C

Chemical resistance

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

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

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Gear box oil	125	discrete	discrete	discrete
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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.

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

The data contained herein, obtained in Loxeal laboratories, are given for information only; if specifics are required, please contact Loxeal Technical Department. Loxeal ensures abiding quality of supplied products according to its own specifics. Loxeal cannot assume responsibility for the results obtained by others which methods are not under Loxeal control. It is user's responsibility to determine suitability for user's purpose of any product mentioned herein. Loxeal disclaims all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from sale or use of Loxeal products. Loxeal specifically disclaims any liability for consequential or incidental damages of any kind, including lost profits.

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