





# **TECHNICAL DATA SHEET FOR LOCKFAST G15**

## **PRODUCT DESCRIPTION**

**Lockfast G15** is designed for the sealing of gaskets. The product is a single component anaerobic, acrylic based product. The product cures when confined in the absence of air between close fitting metal surfaces. It seals close fitting joints between flanges and fixed metal faces and will flex with minor movement from the flange.

## **LOCKFAST G15 CHARACHTERISTICS**

Technology	Acrylic	
Appearance (uncured)	Purple	
Chemical Form	Methacrylate ester	
Fluorescence	Positive under UV	
Cure	Anaerobic	
Secondary cure	Activator	
Components	Single – requires no mixing	
Viscosity	High	
Application	Sealing	

**Lockfast G15** is used as a form-in-place gasket for applications on pumps, compressors, axle covers, and transmission housings.

## PROPERTIES OF UNCURED MATERIAL

	Typical Value	
Specific Gravity @ 25°C	1.1	
Viscosity @ 25°C	700000 – 1500000mPass	
Flash Point	See MSDS	
Fixture Time	1 – 2 hours	

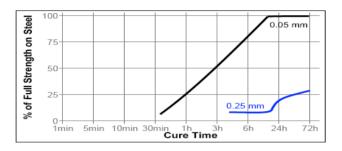
# **CURE SPEED VS. SUBSTRATE**

The rate of cure is dependent on substrate used. The graph below shows the shear strength developed with time on grit blasted steel lap shears compared to different materials and tested according to ISO 4587.



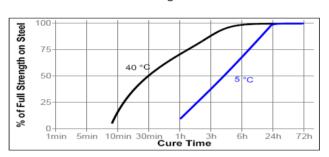
#### **CURE VS. BOND CAP**

The rate of cure will depend on the bond gap. The graph below shows shear strength developed with time on grit blasted steel lap shears compared to different materials and tested according to ISO 4587.



#### **CURE SPEED VS. TEMPERATURE**

The rate of cure is dependent on the ambient temperature. The graph below shows the breakaway strength developed with time at different temperatures on grit blasted steel lap shears and tested according to ISO 4587.



# **CURE SPEED VS. ACTIVATOR**

Where the cure speed is unacceptably long or large gaps are present. An activator can be applied to the surface which will improve cure speed.

# TYPICAL PERFORMANCE OF CURED MATERIAL

Typical Value

Operating Temp °C

-54°C - 150°C

(After 24 hr at 20-25°C) on M10 steel nuts & bolts)

	Typical Value
Lap shear strength steel (grit blasted) ISO 4587	6Nm
Tensile strength steel (grit blasted)	14Nm
ISO 6922	





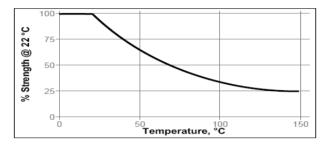


# **TECHNICAL DATA SHEET FOR LOCKFAST G15**

#### TYPICAL HEAT RESISTANCE

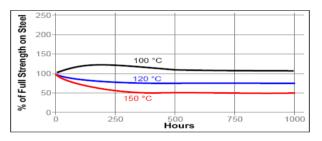
#### **HOT STRENGTH**

Tested at temperature



#### **HEAT AGING**

Aged at temperature indicated and tested at 22°C



#### CHEMICAL / SOLVENT RESISTANCE

Aged under conditions indicated and tested @ 22 °C.

		% of initial strength	
Environment	°C	500 h	1000 h
Motor oil (MIL-L-46152)	125	160	165
Gasoline	22	20	15
Water/Glycol 50/50	87	80	80

## **GENERAL INFORMATION**

This product is not recommended for use in pure oxygen and/or oxygen rich systems and should not be use with chlorine or other strong oxidising materials.

For information on the safe handling of this product, consult the Material Safety Data Sheet, (MSDS).

Where washing systems are used to clean the surfaces before bonding, it is important to check the compatibility of the washing solution with the adhesive. In some cases these solutions can affect the cure and performance of the adhesive. This product is not recommended for use on certain plastics.

#### **DIRECTIONS FOR USE**

- For optimum performance surfaces should be clean and free of arease.
- If the material is an inactive metal consider using activator.
- 3. Shake the product thoroughly before use.
- 4. Apply several drops to the bolt & nut.
- 5. Assemble and tighten as required.
- 6. To prevent the clogging of the nozzle, do not let the tip touch metal surface during application.

## FOR DISASSEMBLY

- 1. Remove with standard hand tools.
- 2. In circumstances where hand tools do not work, use localized heat to bolt or nut, disassemble while hot.

#### **FOR CLEANUP**

1. To remove cured product use a combination of solvent and abrasion such as a wire brush.

#### **PRECAUTION**

- 1. Use proper ventilation, avoid contact with skin and eyes.
- 2. If contact with skin occurs, rinse with warm water or dissolve gradually with appropriate debonder.
- 3. Do not try to remove forcibly.
- 4. If adhesive gets into eye, keep eye open and rinse thoroughly. Seek medical attention immediately.
- 5. Keep well out of reach of children.

# **STORAGE**

Keep adhesive in a cool, dry place optimal storage 8°C-21°C, is recommended unless otherwise labelled. To prevent contamination of unused material, do not return any product to its original container. For specific shelf life information, contact Cyanotec Ltd.

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