

**TECHNICAL DATA SHEET FOR LOCKFAST G74**

**PRODUCT DESCRIPTION**

**G74** is designed to seal close fitting joints between flanges and faces. The product is a single component anaerobic, medium strength thixotropic, acrylic based product. The product cures when confined in the absence of air between close fitting metal surfaces. Provides resistance to low pressures immediately after assembly of flanges.

**G74** offers the following characteristics:

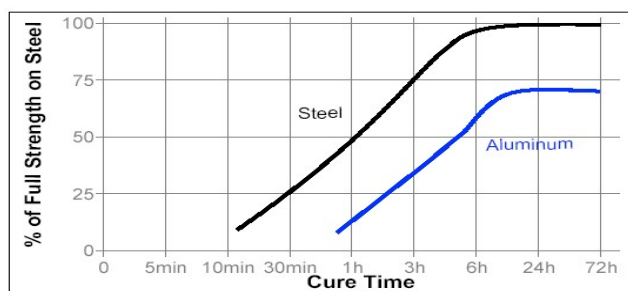
<b>Technology</b>	Acrylic
<b>Appearance (uncured)</b>	Orange paste
<b>Chemical Form</b>	Dimethacrylate ester
<b>Cure</b>	Anaerobic
<b>Florescence</b>	Positive under UV light
<b>Secondary cure</b>	Activator
<b>Components</b>	Single – requires no mixing
<b>Viscosity</b>	Thixotropic
<b>Strength</b>	Medium
<b>Application</b>	Sealing

**PROPERTIES OF UNCURED MATERIAL**

	<b>Typical Value</b>
<b>Specific Gravity @ 25°C</b>	1.1
<b>Viscosity @ 25°C</b>	70000 – 12000 mPas
<b>Flash Point</b>	See MSDS

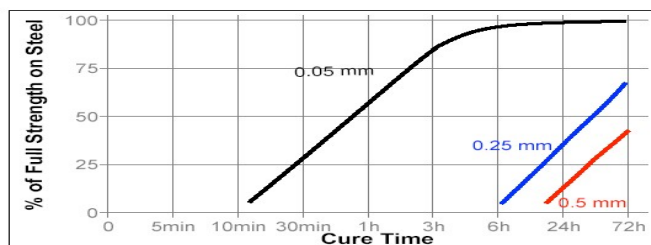
**CURE SPEED VS. SUBSTRATE**

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.



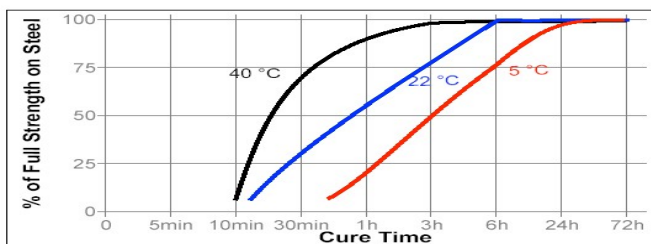
**CURE VS. BOND GAP**

The rate of cure is dependent on the bond gap. The graph below shows the shear strength developed with time on grit blasted steel lap shears at different gap sizes 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 shear strength developed with time on grit blasted steel lap shears at different temperatures 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**

<b>Physical Properties</b>	<b>Typical Value</b>
Coefficient of Thermal Expansion	80x10 <sup>-6</sup>
Coefficient of Thermal Conductivity	0.1

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

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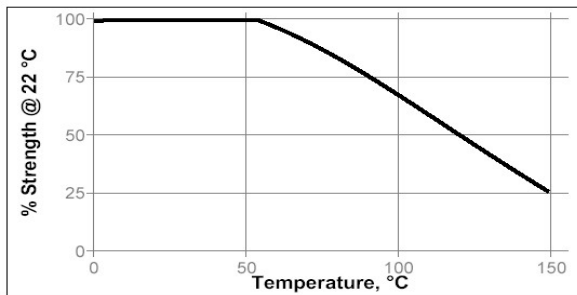
Adhesive Properties	Typical Value
Lap Shear Strength Steel (grit blasted)	8.5 N/mm <sup>2</sup>

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**TYPICAL HEAT RESISTANCE**

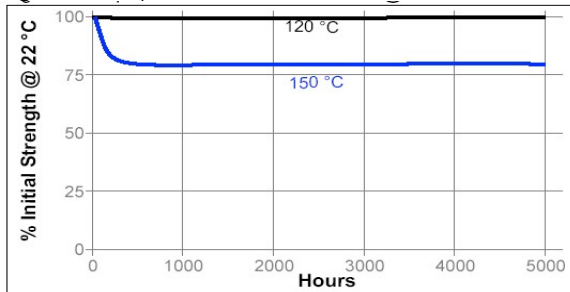
**HOT STRENGTH**

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.

Environment	°C	% of initial strength		
		100 h	500 h	1000 h
Motor oil (MIL-L-46152)	125	100	100	100
Gasoline	22	75	75	75
Water/Glycol 50/50	87	85	85	85

**GENERAL INFORMATION**

This product is not recommended for use in pure oxygen and/or oxygen rich systems and should not be used 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**

1. For optimum performance surfaces should be clean and free of grease.
2. 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 Adhesive Dispensing Ltd.

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