# **Technical Data Sheet**

#### **Product Description**

Studlock is a high strength anaerobic thread locker, designed for the permanent locking and sealing of threaded fasteners which require normal disassembly with standard hand tools and is ideal for general purpose maintenance and is particularly suitable for heavy duty applications.

The product cures when confined in the absence of air between close fitting metal surfaces. A few drops will quickly and securely fix nuts, bolts and screws in position and prevent them from working loose due to vibration or shock. The adhesive forms a more secure fixture than an ordinary lock nut or washer and creates a total seal around the thread to prevent leakage or corrosion.

Studlock is an Anaerobic formulation designed to be used on parts in a clean condition. As received, parts can give reduced strengths, such as those with protective films (oils) etc.

Technology	Acrylic
Composition	Dimethacrylate ester
Appearance	Green Liquid
Viscosity	Low
Cure	Anaerobic
Application	Thread locking
Strength	High

## **Applications**

Studlock performs on active metals (e.g. brass, copper) and passive metals such as stainless steel and plated surfaces. Used for studs into motor housings, nuts onto studs on pump housings and other fasteners where maximum strength is required.

Not suitable for use on wood or plastic.

The product offers high temperature performance and tolerates minor surface contaminations from various oils, such as cutting, lubrication, anti-corrosion and protection fluids.

The product is not for use with pure oxygen systems or systems containing strong oxidising materials.

Use as a conventional studlocker on cleaned parts with strengths up to 40N.m or as a convenient all purpose threadlocker on oily parts with 25N.m typical strength depending on oil type and film.

## Directions for use

- Parts should be clean, dry and dust free.
- · Degreased parts will assist results.
- Apply sufficient product to fill joint.
- Assemble parts in traditional manner.
- To achieve handling strength allow product to cure (approximately 15 minutes).
- Store in cool conditions.
- · Keep out of direct sunlight.
- Product is normally hand applied from the bottle.

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Specific Gravity @ 25°C	1.1 @ 20 <sup>0</sup> C
Viscosity (25°C)	$850 \pm 100$ @ $25^{\circ}$ C (Brookfield Spindle 3 @20rpm)
Flashpoint	>85°C
Temperature Range (°C)	$-53^{\circ}\text{C} - 150^{\circ}\text{C}$
Gap Fill	0.15 mm
Fixture speed with Activator	<5 min @ 20°C.
Fixture speed without	15 min @ 20°C.
Activator	

## **Cured Performance**

Full Cure Time	12 Hours @ 20°C.
Typical Breakaway Strength	Up to 40 N.m (M10 mild steel – DIN54454)
Typical Prevailing Strength	Up to 55 N.m (10'2 mild steel- DIN54454)
Fixture Time - Steel M10's	<15 min @ 20°C.
Fixture Time - Zinc M10's	<25 min @ 20°C.

## Shelf life

12 months @ 20°C and in closed original packaging. Store in a cool area out of direct sunlight.

## Health & Safety in use

IRRITANT: Contains Methacrylate Esters.

Irritates eyes, the respiratory organs and the skin. In case of contact with the skin, wash immediately with plenty of water.

## **Important Note**

Whilst all reasonable care is taken in compiling technical data on the company's products, all recommendations or suggestions regarding the use of such products are made without guarantee, since the conditions of use are beyond the control of the Company. It is the customer's responsibility to satisfy

themselves that each product is fit for the purpose for which he intends to use it, that the actual conditions of use are suitable and that in the light of continued research and development the information relating to each product has not been superseded.

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