# Sure AdhesiveProducts Ltd

## Technical Data Sheet Sureloc T 42

### Product Description

**Sureloc T 42** is designed for the sealing and locking of threaded fasteners which may require easy disassembly with standard handtools. The product is a single component anaerobic, medium strength, acrylic based threadlocker. The product cures when confined in the absence of air between close fitting metal surfaces and prevents leakage and loosening from vibration and shock.

**Sureloc T 42** offers the following characteristics:

| | |
|---|---|
| **Technology** | Acrylic |
| **Appearance** (uncured) | Blue liquid |
| **Chemical Form** | Dimethacrylate ester |
| **Fluorescence** | Positive under UV |
| **Cure** | Anaerobic |
| **Secondary cure** | Activator |
| **Components** | Single – requires no mixing |
| **Viscosity** | Thixotropic, medium |
| **Strength** | Medium |
| **Application** | Threadlocking |

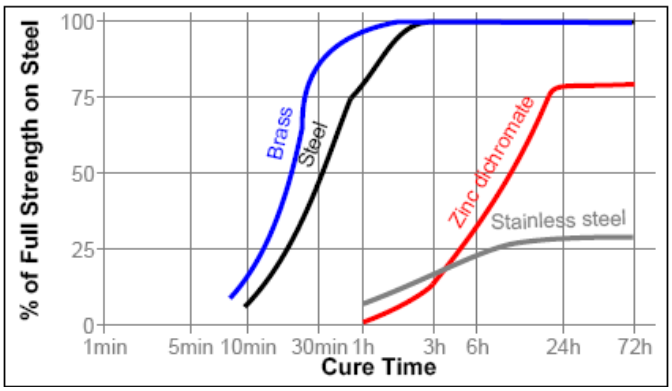
**Sureloc T 42** is particularly suitable for uses on less active substrates such as plated surfaces and stainless steel, where disassembly is required with handtools.

### Properties of Uncured Material

| | Typical Value |
|---|---|
| **Specific Gravity @ 25°C** | 1.08 |
| **Viscosity @ 25°C** | 600-1500 cPs |
| **Flash Point** | See MSDS |
| **Fixture Time** | 10-15 mins |

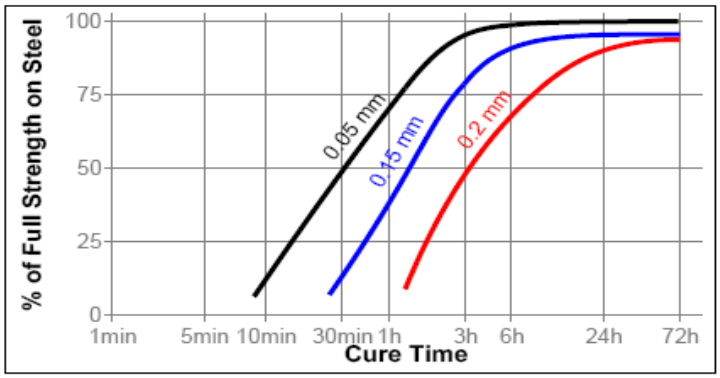
### Cure speed vs. substrate

The rate of cure is dependant on substrate used. The graph below shows the breakaway strength developed with time on M10 steel bolts and nuts compared to different materials and tested according to ISO 10964.



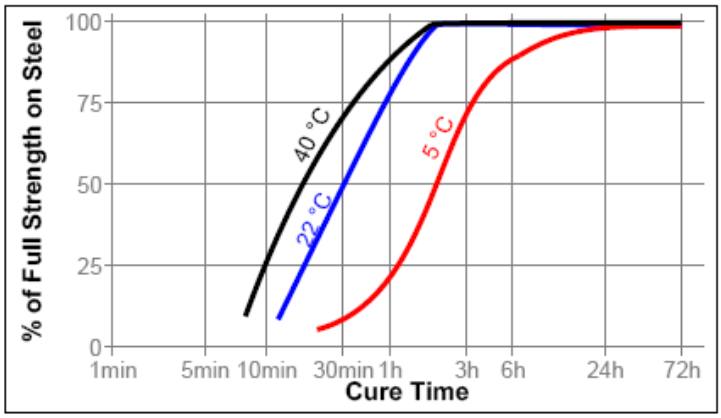

### Cure speed vs. bond gap

The rate of cure will depend on the bond gap. Threaded fasteners gap size is depend on thread type and quality. The graph below shows shear strength developed with time on steel collars and pins at different controlled gaps and tested according to ISO 10123.




### 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 M10 steel bolts and nuts and tested according to ISO 10964.




### 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)

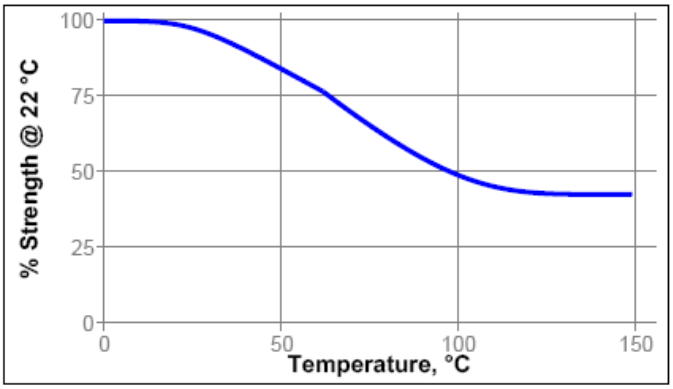
| | Typical Value |
|---|---|
| Breakaway Torque M10 steel bolts & nuts ISO 10964 | 20Nm |
| Prevail Torque M10 steel bolts & nuts ISO 10964 | 7Nm |

Tel: +44 (0)1652 63288 Fax +44 (0) 1652 636688

## Typical heat resistance

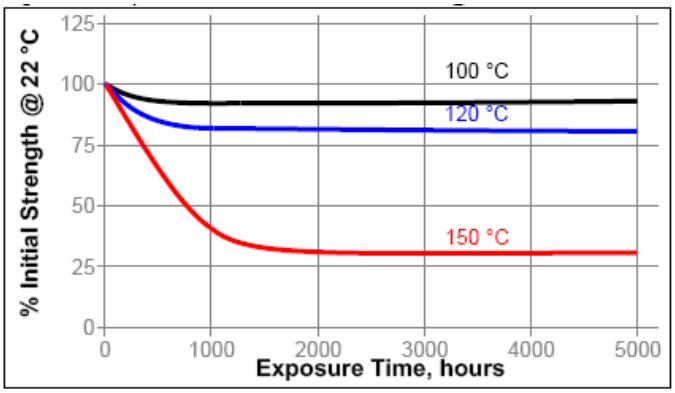
## Hot Strength

Tested at temperature




## Heat aging

Aged at temperature indicated and tested at 22°C




## 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

1. For optimum performance surfaces should be clean and free of grease.
2. If the material is an inactive metal consider using activator.
3. Apply several drops to the bolt & nut.
4. Assemble and tighten as required.
5. Shake the product thoroughly before use.
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 with 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 Sure Adhesive Prod Ltd.

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**Sure Adhesive Products Ltd**
**10b Harrier Rd, Humber Bridge Ind Est, Barton Upon Humber DN18 5 RP**
**Tel: +44 (0) 1652 632888 Fax +44 (0) 1652 636688**
**Email: info@surelocadhesives.com**