

# TECHNICAL DATA SHEET

## MX 577

### Chemical Resistant Thread Sealant



#### Product Description

**MX 577** is a medium strength thread locking adhesive and sealant which is especially suited for pipe, tapered and coarse threads

**MX 577** Can help prevent bi-metallic corrosion

**MX 577** is WRAS registered for potable drinking water and NSF Approved for food area use

#### Characteristics:

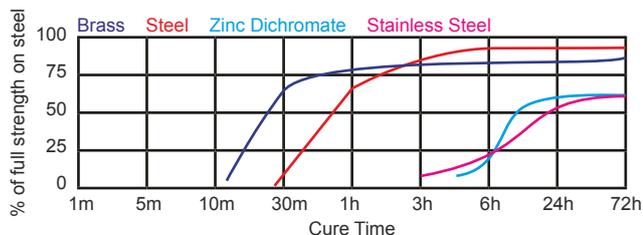
<b>Technology</b>	Acrylic
<b>Appearance (uncured)</b>	Yellow liquid
<b>Chemical Form</b>	Dimethacrylate ester
<b>Cure</b>	Anaerobic
<b>Fluorescence</b>	Positive under UV
<b>Secondary Cure</b>	Activator
<b>Components</b>	Single – requires no mixing
<b>Viscosity</b>	Thixotropic, High
<b>Strength</b>	Medium
<b>Application</b>	Thread sealing

#### Properties of Uncured Material

	Typical Value
<b>Specific Gravity @ 25°C</b>	1.09
<b>Viscosity @ 25°C</b>	70,000 - 130,000 mPas
<b>Flash Point</b>	See MSDS
<b>Seal to operating pressure</b>	4 hours

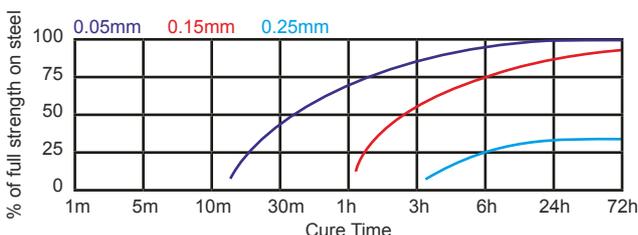
#### Cure Speed vs. Substrate

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



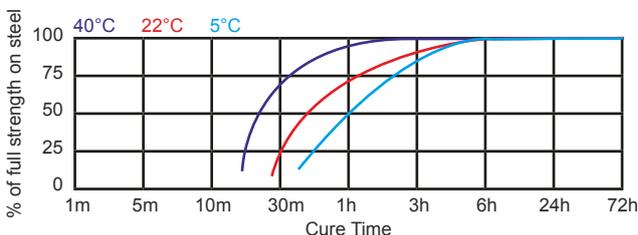
#### Cure Speed vs. Bond Gap

The rate of cure will depend on the bond gap. Threaded fasteners gap size is dependent 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
<b>Pressure Resistance (psi)</b>	10000
<b>Operating temp °C</b>	54°C 150°C
(After 24 hr at 2025°C) on M10 steel nuts & bolts)	
	Typical Value
<b>Breakaway Torque M10 steel bolts &amp; nuts ISO 10964</b>	11 Nm
<b>Prevail Torque M10 steel bolts &amp; nuts ISO 10964</b>	6 Nm



**01670 734400**



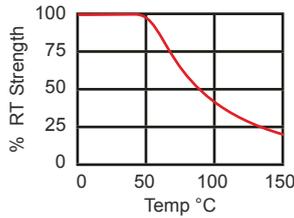
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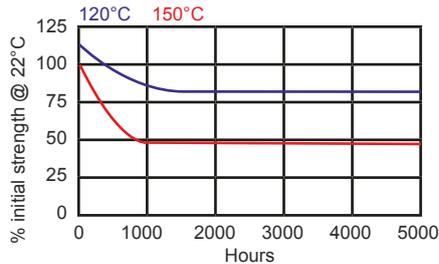
[www.intek-uk.com](http://www.intek-uk.com)

## Typical Heat Resistance



### 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
Unleaded Petrol	22	100	100	100
Brake Fluid	22	100	100	95
Ethanol	22	100	100	95
Acetone	22	90	80	65
Water/Glycol 50/50	87	100	90	90

## 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

- For optimum performance surfaces should be clean and free of grease (internal and external).
- If the material is an inactive metal consider using activator.

- Shake the product thoroughly before use.
- Apply the product to the male fitting on the leading threads in a 360° bead, leave the first thread free, making sure all voids are full. For bigger threads apply more product accordingly and putting a bead on the female.
- Assemble and tighten as required.
- Properly tightened fittings will seal to moderate pressures instantly. For maximum resistance allow a minimum of 24 hours to cure.

### For disassembly:

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

### For cleanup:

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

## Precaution

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

## Storage

Keep adhesive in a cool, dry place optimal storage 8°C to 21°C. is recommended unless otherwise labelled. To prevent contamination of unused material, do not return any product to its original container.

## Disclaimer:

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 himself that each product is fit for the purpose for which he intends to use it, and that the actual conditions of use are suitable



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