



Scotch-Weld™ Anaerobic Threadlocker TL22

Product Data Sheet

Updated : February 2010
Supersedes: March 2007

Product Description Scotch-Weld TL22 is a low strength, thixotropic anaerobic threadlocker. The low removal torque allows easy disassembly yet provides maximum vibration and shock resistance for threaded parts.

Key Features Scotch-Weld TL22 is formulated to prevent vibration loosening and to seal against leaks through threaded components. The low removal torque makes TL22 especially suitable for use on small threaded parts (<6mmØ) and where regular disassembly is envisaged. TL22 is ideal for small set screws and most types of small threaded nuts, bolts, screws and, hex and slot driven components, including keyed fasteners. The low strength allows disassembly without stripping the heads off screws or bolts, so Scotch-Weld TL22 is particularly recommended for use on softer, non-ferrous metals, e.g. brass.

Physical Properties

| | |
|--|--|
| Chemical Type | Dimethacrylate |
| Appearance | Purple |
| Specific Gravity | 1.02 |
| Viscosity cPs (Brookfield RVT spindle 2, 2.5rpm) | Range 4,000-6,000 Typical Value 5,000 |
| Viscosity cPs (Brookfield RVT spindle 2, 20rpm) | Range 1,000-2,000 Typical Value 1,500 |

Performance Characteristics

| | |
|--|---|
| Maximum Gap Fill | 0.25mm |
| Fixture Time | ≤15mins |
| Full Cure | 24hrs |
| Strength Build Up | 15 mins = finger tight 1 hours = ~50% strength 24hours = 100% strength |
| Breakaway Torque N.m (ISO 10964) | Range 5 – 11 Typical 8 |
| Prevail Torque N.m (ISO 10964) | Range 1 – 5 Typical 3 |
| Chemical compatibility | Anaerobic adhesives and sealants should not be used in pure oxygen or chlorine lines. |
| Service Temperature Range | -50 to +150°C |

Additional Product Information Anaerobic adhesives only cure in the absence of air and with metal part activation. Adhesive outside the joint will remain uncured and may be wiped away with a cloth.

Scotch-Weld TL22 is suitable for most smaller diameter, fine, medium and coarse-threaded screws, nuts and bolts. Not recommended on certain plastics as stress cracking can sometimes result. Some anti-corrosion chemicals inhibit the cure system in this type of anaerobic. Trials are recommended to establish whether cleaning of the parts is necessary. Scotch-Weld AC64 Activator may be required on plated parts.

Application Techniques Ensure parts are clean, dry and free from oil and grease. Apply adhesive to all engaged threads. Assemble parts and allow to cure. Wipe excess adhesive from outside of joint
Heating the assembled parts accelerates the curing process.
Scotch-Weld AC64 Activator may be used to accelerate cure and should be used if the application temperature is below 5°C. The use of an accelerator may reduce the final bond strength by up to 30%

Storage Conditions Keep the adhesive in a cool, dry place away from direct sunlight. Under such conditions shelf life at room temperature will be 12 months.

Refrigeration to 5°C gives optimum storage stability

Shelf Life 12 months from date of despatch by 3M when stored in the original carton at 21°C

Precautionary Information Refer to product label and material Safety Data Sheet for health and safety information before using the product. For information please contact your local 3M Office. www.3M.com

For Additional Information To request additional information or to arrange for sales assistance 0870 6080050
Address correspondence to: 3M United Kingdom PLC, 3M House, 28 Great Jackson Street, Manchester, M15 4PA

Important Notice All statements, technical information and recommendations contained in this document are based upon tests or experience that 3M believes are reliable. However, many factors beyond 3M's control can affect the use and performance of a 3M product in a particular application, including the conditions under which the product is used and the time and environmental conditions in which the product is expected to perform. Since these factors are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for the user's method or application.

All questions of liability relating to this product are governed by the terms of the sale subject, where applicable, to the prevailing law

Values presented have been determined by standard test methods and are average values not to be used for specification purposes. Our recommendations on the use of our products are based on tests believed to be reliable but we would ask that you conduct your own tests to determine their suitability for your applications. This is because 3M cannot accept any responsibility or liability direct or consequential for loss or damage caused as a result of our recommendations

3M and Scotch-Weld are trademarks of the 3M Company.

3M United Kingdom PLC
3M House,
28 Great Jackson Street,
Manchester,
M15 4PA

Product Information :
Tel 0870 60 800 50
Fax 0870 60 700 99

3M Ireland Limited
The Iveagh Building
The Park, Carrickmines
Dublin 18,
Ireland

Customer Service :
Tel (01) 280 3555
Fax (01) 280 3509