



Scotch-Weld™ Retaining Compound RT20G

Product Data Sheet

Updated :February 2010
Supersedes:September 2008

Product Description Scotch-Weld RT20G is a single component, high viscosity, thixotropic anaerobic retaining compound. RT20G cures when confined in the absence of air between close fitting metal surfaces

Key Features Scotch-Weld RT20G is formulated for bonding cylindrical parts, to give high strength bonds. RT20G is designed to augment the strength of slip fit assemblies and for use on loose-fitting or worn parts, where larger gap fill is required. RT20G is designed for high service temperature applications. RT20G prevents corrosion of assembled parts.

Physical Properties	Chemical Type	Dimethacrylate
	Appearance	Yellow/Green
	Specific Gravity	~1.03
	Viscosity cPs (Brookfield RVT spindle 4, 2.5rpm)	Range 10,000 – 30,000 Typical Value 20,000
	Viscosity cPs (Brookfield RVT spindle 4, 20rpm)	Range 5,000 – 10,000 Typical Value 7,500

Performance Characteristics	Maximum Gap Fill	0.4mm
	Fixture Time	15mins
	Full Cure	24hrs
	Strength Build Up	40 mins = 10% strength 3 hour = ~50% strength 24hours = 100% strength
	Breakaway Torque N.m (ISO 10964)	Range 22 – 48 Typical 35
	Prevail Torque N.m (ISO 10964)	Range 16 – 50 Typical 32
	Shear Strength N/mm² (ISO 10123)	Range 11 – 28 Typical 18
	Chemical compatibility	Anaerobic adhesives and sealants should not be used in pure oxygen or chlorine lines.
	Service Temperature Range	-50 to +230°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. RT20G is suitable for medium strength retaining applications that require large gap filling. RT20G is 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. 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 area. Assemble parts and allow to cure. Wipe excess adhesive from outside of joint. Heating the assembled parts accelerates the curing process. 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, call 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