



Scotch-Weld™ Retaining Compound RT01

Product Data Sheet

Updated :February 2010
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Product Description Scotch-Weld RT01 is a single component, general purpose, anaerobic retaining compound. RT01 cures when confined in the absence of air between close fitting metal surfaces

Key Features Scotch-Weld RT01 is formulated for bonding cylindrical parts, to give high strength bonds. Typical applications include bonding gears on to shafts. RT01 is designed to augment the strength of press fit assemblies. Once applied, parts slip together easily, lubricated by the adhesive. RT01 prevents corrosion of assembled parts.

Physical Properties

Chemical Type	Dimethacrylate
Appearance	Green
Specific Gravity	~1.07
Viscosity cPs	Range 100 –150 Typical Value 125

Performance Characteristics

Maximum Gap Fill	0.20mm
Fixture Time	15mins
Full Cure	24hrs
Strength Build Up	20 mins = 10% strength 1 hour = ~50% strength 24hours = 100% strength
Breakaway Torque N.m (ISO 10964)	Range 25 – 50 Typical 36
Prevail Torque N.m (ISO 10964)	Range 22.5 – 50 Typical 35
Shear Strength N/mm² (ISO 10123)	Range 12 – 26 Typical 18.5
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. RT01 is suitable for high strength retaining applications that require small gap filling. RT01 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. 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 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
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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