

V-638

Anaerobic Retaining Compound

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Date Revision: 04/2021

PRODUCT DESCRIPTION

V-638 is a single component, highest strength anaerobic retaining compound. V-638 cures when confined in the absence of air between close-fitting metal surfaces.

KEY FEATURES

Velure V-638 is formulated for bonding cylindrical parts, to give very high strength bonds. Typical applications include locking sleeves onto shafts. V-638 is designed to augment the strength of press fit and slip fit assemblies. Once applied, parts slip together easily, lubricated by the adhesive. V-638 prevents corrosion of assembled parts.

PHYSICAL PROPERTIES

Chemical Type	Dimethacrylate/Triacrylate
Appearance	Green
Specific Gravity	~1.08
Viscosity cPs	Range 1,800 – 3,300 Typical Value 2,500

PERFORMANCE CHARACTERISTICS

Maximum Gap Fill	0.25mm
Fixture Time	≤15mins
Full Cure	24hrs
Strength Build Up	15 mins = 10% strength 45 mins = ~50% strength 24hours = 100% strength
Breakaway Torque N.m (ISO 10964)	Range 20 – 50 Typical 32
Prevail Torque N.m (ISO 10964)	Range 10.5 – 55 Typical 32
Shear Strength N/mm ² (ISO 10123)	Range 11 – 37 Typical 23
Chemical compatibility	Anaerobic adhesives and sealants should not be used in pure oxygen or chlorine lines.
Service Temperature Range	-50 to +150°C

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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.

V-638 is suitable for high strength retaining applications that require medium gap filling. V-638 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. 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. 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 when stored in the original carton at 21°C.

PRODUCT USE

All statements, technical information and recommendations contained in this document are based upon tests or experience that are reliable. However, many factors beyond control can affect the use and performance of a 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 product to determine whether it is fit for a particular purpose and suitable the user's method or application.

NOTE

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 cannot accept any responsibility or liability direct or consequential for loss or damage caused as a result of our recommendation.