AFC INTERNATIONAL PTY LTD.

TECHNICAL DATA SHEET

DynaGrip® QUALITY PRODUCTS

HIGH TEMPERATURE RETAINING COMPOUND PART NO. 50620 (50mL)

DESCRIPTION

DynaGrip® High Temperature Retaining Compound is a high strength anaerobic retaining compound . Formulated for bonding cylindrical parts, to give high strength bonds The product is a single component, anaerobic liquid that cures when confined in the absence of air between close fitting metal surfaces. Fills gaps up to 0.38mm (0.015 inches). Applied prior to assembly. Excellent chemical resistance with a temperature resistance range of -50°C to 232°C (-65°F to 450°F). Prevents corrosion of assembled parts.

FEATURES

- No mixing
- Retains bearings, sleeves, collars gears and more.
- High temperature service 232°C.
- Prevents corrosion of assembled parts.

TYPICAL APPLICATIONS

- Bonds cylindrical parts, to give high strength
- Augment the strength of slip fit assemblies.
- Use on loose-fitting or worn parts, where larger gap fill is required
- High service temperature applications.

PHYSICAL PROPERTIES

Monomer (Liquid)

Base Compound.....Dimethacrylate Ester
Colour.....Yellow/Green
Viscosity (cP @ 20^0C/68^0F).....20,000 cP
Flash Point (TCC).....>93^0C(200^0F)
Gap Fill.....0.38mm(.0015″)
Corrosivity.....None
Toxicity.....Low
Shelf Life @ 4^0C(40^0F).....1 year unopened
Curing Properties.....Depends on environmental conditions and the substrates used

Polymer (Cured)

Locking Strength.....High
Service Temp. Range.....-50^0C to 232^0C
.....(-65^0F to 450^0F)
Appearance.....Yellow/green liquid
Sheer Strength (steel nuts and bolts).....24 N/mm2
Full Cure Time.....24 hours

PERFORMANCE OF CURED MATERIALS

Bond strength after 24 hours at 20^{0}C to 25^{0}C on steel nuts and bolts.

	Average Value	Range
Breakaway Torque	34 N.m (300 in.lbs.)	25-42 N.m (221-371in. lbs.)
Prevailing Torque	32 N.m (283 in. lbs.)	25-42 N.m (221-371 in. lbs.)

CURING PERFORMANCE

The gap of the bond line will affect set speed. Smaller gaps tend to increase the speed. Activators can be applied to improve set speed but may also impair overall adhesive performance.

CURE SPEED VS. SUBSTRATE

Cure speed and strength vary according to the substrates. When used on mild steel and brass components anaerobic adhesives will reach full strength more rapidly than more inert materials such as stainless steel and zinc dichromate.

CHEMICAL RESISTANCE

Sheer strength on steel after 500 hours.

Solvent	% Strength Retained
• Motor Oil	100
• Unleaded Gasoline	100
• Trichloroethane	100
• Brake Fluid	100
• Ethanol	100
• Acetone	100
• Water/Glycol Mix	80

GENERAL INSTRUCTIONS

Surfaces to be bonded should be clean and dry and free of grease.

Product should be applied in enough quantity to fill all engaged threads. The product performs best in thin bond gaps. Very large gaps may create gaps, which will affect the cure speed and overall strength. Good contact is essential. An adequate bond develops in 15 to 45 minutes and maximum strength is attained in 24 hours.

This product is not recommended for use in pure oxygen environments and/or oxygen rich systems and should not be selected as a sealant for chlorine or other strong oxidizing materials.

This product is not designed for plastics, particularly thermoplastics where stress cracking of the plastic could result. It is recommended to confirm compatibility of the product with all substrates prior to use.

STORAGE AND SHELF LIFE

When stored in the original unopened containers at or below 32°C (90°C), **DynaGrip**® High Temperature Retaining Compound as a shelf life of 12 months from date of shipment.

In Countries where high heat and humidity are a factor, special precautions must be taken. Store product in a covered, well-ventilated warehouse and avoid excessive heat conditions. Storage in high heat, high humidity conditions may reduce shelf life by up to 30%. Rotation of stock is an absolute necessity. Cartons should always be stacked upright. DO NOT stack cartons on their side. **NEVER** stack cartons more than 8 high. DO NOT store within 1 metre (4 feet) of roofline of the warehouse or storage building.

GENERAL INFORMATION

The information and data contained herein is believed to be accurate and reliable; however, it the user's responsibility to determine suitable of use. Since the supplier cannot know all the uses, or the conditions of use to which there products may be exposed, no warranties concerning the fitness or suitability for a particular use or purpose are made.

It is the user's responsibility to thoroughly test any proposed use of our products and independently conclude satisfactory performance in the application.

Likewise, if the application, product specifications or manner in which our products are used require government approval or clearance, it is the sole responsibility of the user to obtain sure authorization.

The supplier warrants only that its products will meet its specifications. There is no use, nor any other express or implied warranty. The users exclusive remedy and the suppliers sole liability is limited to refund of the purchase price or replacement of any product when to be otherwise than as warranted. The supplier will not be liable for incidental or consequential damages of any kind.

Suggestions of uses should not be taken as inducements to infringe any patents.

DynaGrip® QUALITY PRODUCTS

AFC International Pty Ltd.
21- 23 Hobart Street
(PO BOX 497)
Riverstone NSW 2765
TEL +61 2 9627 7125
www.afcinternational.com.au