## TECHNICAL DATA SHEET

# **ORAPI 101-SCREWLOCK**

## Low Strength Anaerobic Threadlocker

### **Description**

**Orapi 101-Screwlock** is a single component, low strength anaerobic threadlocking resin which cures to a tough, solid thermoset plastic when in contact with metal in the absence of air. The product is recommended for the locking and sealing of ferrous and non-ferrous metal fasteners (machine screws/nuts/bolts etc) replacing crown and "nylock" nuts, star and spring washers, wire retainers etc to prevent self-loosening.

**Orapi 101-Screwlock** is designed for use with smaller diameter fasteners (up to M3) or on larger diameter fasteners where the products low strength allowing easy dismantling is desirable.

### **Outstanding Features**

- Resists loosening by shock loading and vibration
- Gives a fast and reliable cure on most metallic surfaces
- Seals and prevents "fretting" corrosion on threaded components
- Resistant to Water, Oils / greases, solvents and most industrial fluids
- Easy disassembly of locked components where necessary

### **Applications**

- Suitable for use with most industrial / automotive metal fasteners
- Threaded components Grub screws, nuts, bolts etc
- Components that require frequent disassembly
- Lightly oiled or slightly contaminated parts

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### **Directions for use**

Ensure that surfaces to be bonded are clean and free from grease, dirt, dust and any other contamination. To ensure best cleaning results use **Orapi 503-Kleaner.** Unscrew cap and cut off the top of the nozzle using a sharp knife or similar implement taking care to point the blade away from the body at all times. Apply **Orapi 101-Screwlock** to the fastener in sufficient quantity to fill all engaged threads. Assemble the threaded components and tighten as required. Allow the bond to fully cure before putting equipment into service.

### For reduced cure time or use with "inactive" metals / plastics.

Cure time(s) of anaerobic resins can be reduced by when the product is used in conjunction with **Orapi Anaerobic Activator**. When components manufactured from "inactive" metals and some plastics are encountered use of an **Orapi Anaerobic Activator** will primarily increase the effectiveness of the adhesive / sealant while also reducing cure times.

#### To reduce cure time

Apply the selected activator to one surface and allow to dry. Apply resin to the other surface and assemble components, tighten as required.

## Use with "inactive" metals / plastics (i.e. stainless steel)

Apply the selected activator (**Orapi 3140 / 3141**) to both surfaces and allow to dry. Apply resin in the normal manner and assemble components, tighten as required.

### **Typical Characteristics**

Appearance : Viscous purple liquid
Base : di-Methacrylate resin

Viscosity ((@  $20^{\circ}$ C) : 1200 - 5000 cPs

SG (kg / ltr) : 1.1

Cure speed

Handling\* : 10 to 25 mins
Full cure : 24 hours

Gap filling capability : Upto 0.1mm

Temperature range : -55°C to +150°C

**Bond Characteristics** 

Breakloose Torque\* : 5 - 15 Nm Prevailing Torque\* : 2 - 18 Nm Static Shear\* : 7 - 12 Nm

### **Health & Safety**

Further Technical Data and Health & Safety (COSHH, MSDS) is available from the Technical Department Orapi Limited, Unit 1, Rosse Street, Bradford, BD8 9AS, West Yorkshire, England.

Telephone +44 (0) 1274 822000 Fax +44 (0) 1274 822002

<sup>\*</sup>Tested on M10 mild steel nut and bolt.