



## PIPE SEAL

### Universal Anaerobic Pipe Sealant

#### PRODUCT DESCRIPTION

Orapi 205-Pipe Seal is a single component thixotropic anaerobic threadlocking resin which cures to a solid thermoset plastic when in contact with metal in the absence of air between close fitting metals. Orapi 205-Pipe Seal is formulated to lock and seal medium to coarse straight and tapered pipe threads on pipes Ø15mm to Ø80mm.

#### FEATURES & BENEFITS

- Prevents vibration, loosening and leakage through pipe threads.
- Gives low strength break and prevail torque on assembled joints – enabling easier disassembly and servicing.
- The lubricity of Orapi 205-Pipe seal gives an instant low pressure seal (up to 2 bar after 20 mins) allowing systems to be started up without delay.
- Seals and prevents “fretting” corrosion on threaded connections.
- Thixotropic nature prevents migration on uncured product during application.
- Good gap filling ability.
- Good resistance to solvents, oils and most industrial fluids.

#### 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.

Apply the adhesive to all engaged threads (although to minimise excess adhesive inside the joint, apply adhesive only to the male part, leaving the first two threads clear).

Assemble parts and allow to cure.

Wipe excess adhesive from outside of joint.

Maximum recommend gap for Orapi 205-Pipe Seal is 0.50mm.

Orapi 205-Pipe Seal 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.

#### Manufacturing site and registered office

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Fax: +44 (0) 121 525 4919  
Info@orapiapplied.com

## PRODUCT DATA SHEET

# 205

Hot strength: Orapi 205-Pipe Seal is suitable for use at temperatures up to 150°C. At 150°C the bond strength will be ~30% of the strength at 21°C.

Heat ageing: Orapi 205-Pipe Seal retains ~85% full strength when heated to 100°C for 9- days then cooled and tested at 21°C.

For reduced cure time or use with “inactive” metals / plastics.

Cure time(s) of anaerobic resins can be reduced 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. **The use of an activator may reduce bond strength. Orapi Applied Ltd recommends testing on the parts to measure the effect.**

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 to both surfaces and allow to dry. Apply resin in the normal manner and assemble components, tighten as required.

## PHYSICAL CHARACTERISTICS

Chemical type:	Dimethacrylate
Appearance:	White paste
Specific gravity:	1.17
Viscosity <sup>1</sup> cPs:	(Range) 150,000 – 450,000 (Typical value) 300,000
Viscosity <sup>2</sup> cPs:	(Range) 30,000 – 130,000 (Typical value) 80,000
Breakaway Torque <sup>3</sup> :	(Range) 2 – 8 N/m (Typical) 3.5 N/m
Prevail Torque <sup>3</sup> :	(Range) 0.5 – 4 N/m (Typical) 1.5 N/m
Initial fixture time <sup>4</sup> :	≤120 mins
Full cure:	24 Hrs
Flash point:	>100 °C
Max gap fill:	0.5 mm
Shelf life @ 20°C:	12 months
Temp range (Continuous)	-50 to +150 °C

<sup>1</sup> Brookfield RVT ‘T’-spindle D, 2.5rpm

<sup>2</sup> Brookfield RVT ‘T’-spindle D, 2.0rpm

<sup>3</sup> On M10 black oxide steel bolt and M10 bright steel nut, ISO 10964

<sup>4</sup> ISO 10964

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### SPECIAL STORAGE

Store in a cool, dry place out of direct sunlight at 8 - 21°C.

### HEALTH AND SAFETY

Refer to Material Safety Data Sheet for further information.

### PACKAGING

205/250ml	6 x 250ml
205/65ml	6 x 65ml
205/50ml	6 x 50ml

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