

Product Description

Anabond 340 is a single component dimethacrylate ester based fast curing anaerobic adhesive system specially designed for locking and sealing of threaded pipes and fittings. The product gets polymerized when confined between closely mating metal surfaces in the absence of air and prevents loosening and leakage from shock and vibration. The product exhibits good temperature performance, chemical resistance and lubricating property.

The high lubricating properties of this compound prevent galling on stainless steel, aluminium and all other metal pipe threads and fittings. It is recommended for industrial applications in chemical processing, petroleum refining, pulp/paper, waste treatment, textile utilities/power generation, marine, automotive, industrial equipment, gas compression and distribution industries.

Chemical Type	: Dimethacrylate ester
Appearance	: Paste
Cure initiator	: Anaerobic
Application	: Thread sealing
Strength	: Low
Colour	: White

Properties of uncured material

Specific Gravity at 30 °C, ATM - R004 x (JIS K6820)	1.0 - 1.1
Viscosity at 30 °C	Paste
Flash point	refer MSDS

Curing performance

The product cures when confined in the absence of air between closely fitting metal surfaces. The curing time is influenced by the gap between the surfaces, the kind of metal, surface treatments and temperature. The assembly can be subjected to limited test after functional cure. Although functional cure is developed in relatively short time, curing continues for at least 24 hours before full properties are developed. Curing tested according to ATM* - R031 (ISO 10964).

Handling cure at 30 ± 2 °C, minutes	
M10 Steel bolts & Nuts	10 - 15
Functional cure at 30 ± 2 °C, h	12
Full cure at 30 ± 2 °C, h	24

Operating Parameters

Recommended gap filling	mm	0.5
Maximum thread size		M75
Service temperature	°C	-50 to + 150

Properties of cured material

Cured for 24 hours at 30 ± 2 °C, tested according to ATM - R031 (ISO 10964).

Breakaway torque, M10 Steel bolts and nuts	N.m (kgf.m)	8 - 12 (0.8 - 1.2)
Prevailing torque, M10 Steel bolts and nuts	N.m (kgf.m)	9 - 13 (0.9 - 1.3)

Pressure resistance

Cured for 24 hours at 30 ± 2 °C, tested according to ATM - R035 (IS 13055).

MS Manifold with MS bolts (oil medium)	MPa (kg / cm ²)	≥ 40 (≥ 400)
MS Manifold with MS bolts (Pneumatic)	MPa (kg / cm ²)	Min. 1.0 (Min. 10)

Typical Environmental Resistance

Breakaway torque tested on M10 steel bolts and nuts according to ATM - R031 (ISO 10964). Test indicates the effect of environment on strength and is not a measure of sealing performance.

Chemical resistance

Cured for 24 hours at 30±2°C, aged under conditions indicated and tested at 30 ± 2°C.

Chemicals	% of initial strength	
	168 h	500 h
Motor oil 20W40,125 °C	98	96
Gasoline, 25 °C	100	98
Water / Glycol, 50 / 50, 87 °C	70	65

General information

Before handling read product safety data sheet and container label for safe use.

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

To prevent the product from clogging in the nozzle, do not allow the tip to touch the metal surfaces during application.

Do not return the used product back to the original container as it may be contaminated during usage.

Where aqueous washing systems are used to clean the surfaces before bonding, it is important to check the compatibility of the washing solution with the adhesive. In some cases these aqueous washes can affect the cure performance of the adhesive.

The product is not normally recommended for use on plastics, particularly thermoplastic materials where stress cracking of plastic could result. Users are recommended to check the compatibility of the product with such substrates.

Direction for use Substrate preparation

- All surfaces must be clean and dry.
- For best results degrease the fasteners with suitable solvent and allow it to dry before applying the adhesive.
- If the metal surface is inactive or curing speed is slow use activator, Anabond Ekaprime 021.

Method of application

- Apply the sealant to the leading threads of the male fitting, leaving the first thread free. Force the material into the threads to thoroughly fill the voids.
- For bigger threads and voids, adjust the sealant amount accordingly and apply product on the female threads also.
- Using accepted trade practices assemble and tighten fittings until proper alignment is obtained
- Properly tightened fittings will seal instantly to moderate pressures. For maximum pressure resistance and chemical resistance allow the product to cure for a minimum of 24 hours.

Disassembly and cleaning

- Remove with standard hand tools.
- When hand tools do not work, heat the assembly to approximately 250 °C and disassemble while hot.
- Cured product can be removed with a combination of soaking in a solvent and mechanical abrasion such as a wire brush.

Storage

- Store the material in its original container in a cool and dry condition between 8 and 35 °C. Keep away from heat source and direct sunlight.
- Storage other than recommended temperature and conditions will have impact on the properties of the product.
- The product is non-volatile and non-flammable at room temperature.

SKU	Packaging
100 g & 250 g	Collapsible tube

Shelf life

Fifteen months from the date of manufacture in it's original container, unopened and recommended storage conditions.



Anabond[®]

Technical Data Sheet

Technology : Dimethacrylate ester

Product name : Anabond 340

Revised date : Feb 2015

Revision No. : 01

Unit Conversion

$(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$	$\text{N} \times 0.225 = \text{lb}$
$\text{kgf.m} \times 9.81 = \text{N.m}$	$\text{N.m} \times 8.851 = \text{lb.in}$
$\text{MPa} \times 145 = \text{psi}$	$\text{N} / \text{mm} \times 5.71 = \text{lb/in}$
$\text{mPa.s} = \text{cP}$	$\text{N.m} \times 0.738 = \text{lb.ft}$
$\text{mm} / 25.4 = \text{inches}$	$\text{N.m} \times 0.142 = \text{oz.in}$
$\mu\text{m} / 25.4 = \text{mil}$	

Disclaimer - Please read carefully

- The data contained herein are furnished for information only and are believed to be reliable. We cannot assume responsibility for the results obtained by others over whose methods we have no control.
- It is the user's responsibility to determine suitability for the user's purpose of any production methods mentioned herein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling and use thereof.
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For product information, contact :

Anabond Limited

No.36, Type II, Dr. V.S.I Estate,
Thiruvanmiyur, Chennai, TN - 600041.

Ph : +91 (44) 23460041/42/43

Fax : +91 (44) 2346 0048

e-mail : marketing@anabond.com

web : www.anabond.com