

ThreeBond 1324

(Anaerobic Adhesive / Medium Strength)

The product Three Bond 1324 is a one-component, anaerobic reactive adhesive/sealant without solvents which has been specially developed for the assembly of medium-sized bolts and threads from M8 to M36. Three Bond 1324 is to be applied on one of the fitting surfaces in liquid condition at room temperature. After the assembly of the parts, the product develops within a very short time a strong sealing which is completely adapted to the surface structure of the fitting surfaces. All roughnesses in the micro-range such as tool marks and scratches as well as unevennesses in the macro-range (waviness of the fitting surface) are filled out and consequently ensure absolute conformity. Due to the highly resistant chemical properties and the good cohesion, a high stability is obtained inside the joint sealed.

1. Features

- Excellent application by means of fully automatic dispensing equipment as the product is one-component and solventfree.
- The anaerobic curing starts immediately after the assembly of the fitting parts due to the exclusion of air and the metal contact (nearly all metals are suited for this).
- As hardening by heat does not take place, parts having been joined can be easily detached from each other for repairing machines.

- Excellent chemical and thermal resistance as well as very good vibration damping and shock

absorbing properties due to outstanding mechanical characteristics.

2. Typical properties

Test Item	Result	Unit
Colour	Red	
Viscosity at 25°C	600	mPa·s
Density at 25°C	1.13	g/cm ³
Optimal clearance	0.01 ~ 0.02	mm
Max. clearance	0.3	mm
Curing until functional strength at 25°C	2	h
Curing until final strength at 25°C	24	h
Break-loose torque Fe (M10 x P1.5)	22	N·m
Prevailing torque Fe (M10 x P1.5)	30	N·m
Compressive shear strength Fe (0.01 mm)	28	MPa
Compressive shear strength Fe (0.05 mm)	21	MPa
Effective temp. range	- 60 ~ 150	°C
Shelf life at 25°C	12	months

3. Break-loose torque vs. Material of test piece

Test Item	Result	Unit
Fe-Bolt M10	22	N·m
Sus-Bolt M10	12	N·m
Al-Bolt M10	13	N·m
CuZn-Bolt M10	11	N·m
ZnCr-Bolt M10	9	N·m
Ni-Bolt M10	15	N·m
Fe ₃ O ₄ -Bolt M10	21	N·m

4. Curing time vs. Temperatur

Temperature	Curing time
25°C	24 h
80°C	30 min
100°C	20 min
120°C	10 min

5. Handling

- Keep the product in the original container tightly closed and store it in a dark, dry, sufficiently ventilated and cool place.
- Before opening the container let the product reach room temperature as otherwise the formation of dew might be resulting.
- In order to obtain optimal results, remove humidity, fat and other impurities from the fitting surfaces.
- According to the nature of the joints (width, surface roughness, unevennesses, etc.) apply an appropriate quantity of anaerobic adhesive uniformly on one of the fitting

surfaces, join the parts immediately, position them correctly and fix them.

- When applying anaerobic adhesive by means of our dispensing systems, always a uniform, clean and reliable dispensing even in case of the most complicated shapes will be resulting ensuring at the same time a minimum consumption.
- A product once transferred into another container should not be returned to the original container. Excess sealant can be easily wiped off with a cloth.

6. Packing

50 g and 250 g bottles

All data given here were compiled to the best of our knowledge and are based on experiments and tests of our Company. We cannot guarantee the results obtained through the use of our products, and all products are sold and samples given without any warranty, expressed or implied, of fitness for any particular purpose or otherwise and upon condition that the user shall make his own tests to determine the suitability of the product for his purpose.