

ANAEROBIC ADHESIVES AND SEALANTS Type AN



User's manual

Advantages

AN products are high quality anaerobic adhesives and sealants on the basis of special methacrylate resins, especially made for economical threadlocking, retaining and sealing of threaded, cylindrical and pipe assemblies.

The characteristic feature of AN is the curing in contact with metal while deprived of air. It provides a shock- and vibration-resistant joint with excellent resistance to chemicals and solvents.

Due to its liquid consistency AN completely fills the gaps, thus giving protection against leakage and fretting corrosion.

AN is simple, easy to use and very economical. Handling strength is reached within a few minutes and final strength within a few hours at room temperature. Metering and mixing is not necessary, there

is no pot life to be respected and product wastage is minimised.

In many respects, AN is superior to conventional methods of assembly.

Field of Application

Offering different grades of strength and viscosity, AN is suitable for a wide range of applications:

- for locking, fastening and sealing of screw connections from M5 to M80, for pipe joints as well as coarse threaded connections up to 3".
- for reliable retaining of bearings, bushings, bolts and other press or slip fitted connections.
- for sealing and locking hydraulic and pneumatic pipe connections.

In addition, AN is highly recommended for use in flange sealing, replacing conventional gaskets in many cases. The benefits are:

- no expensive stock keeping
- no problems with complicated seals
- no setting of the seals (unlike solid gaskets)



- ***one-component***
- ***fast curing***
- ***ready-to-use***
- ***solvent-free***
- ***non-shrinking***
- ***vibration-proof***

- ***automotive industry***
 - ***engine and plant construction***
 - ***manufacture of pumps and pipes***
 - ***hydraulic and pneumatic equipment***
 - ***precision mechanics***
 - ***in electrical engineering and electro-technics***
- and in nearly all fields of repair and maintenance.***

Application

In general, AN fluid does not require special pretreatment as slightly oily surfaces (e.g. on 'as received' parts) will be tolerated. However, best results will be achieved on cleaned, degreased parts. If required, the parts should be slightly roughened.

AN product is ready for use and should be applied evenly direct from the bottle/tube with the dispensing tip (avoid direct contact of dispensing tip with metal). On pressfitted parts and larger cylindrical assemblies a thin and uniform layer should be applied on both surfaces. In the case of threaded blind holes fill sufficient quantity in the bore hole. On screws and bolts, apply around the thread.

Do not pour back into the bottle any fluid which had contact with metal; even smallest metal particles will cause the content of the bottle to cure.

Medium strength : dismantling possible with ordinary tools

Curing

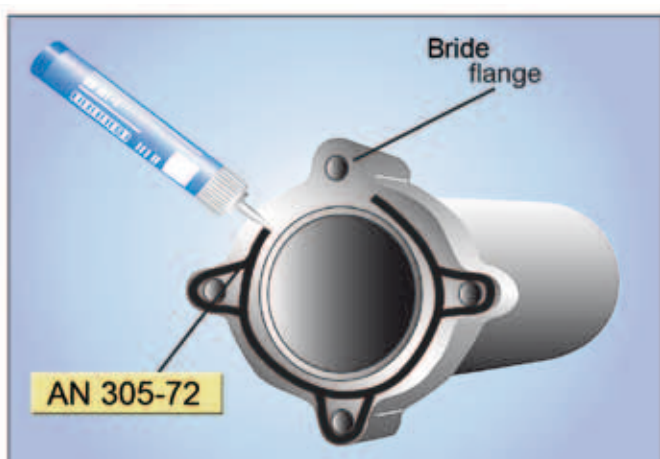
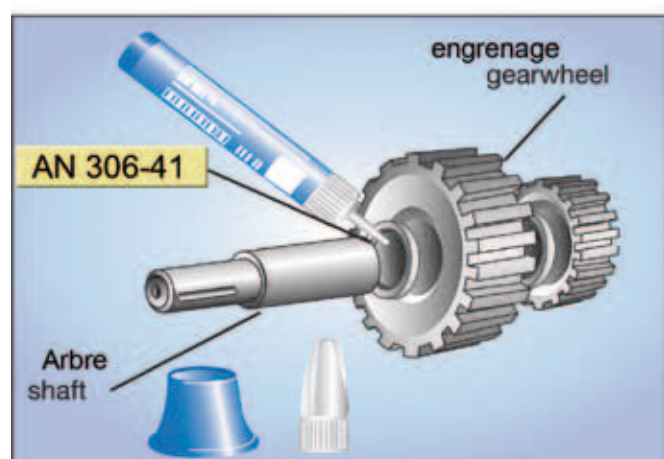
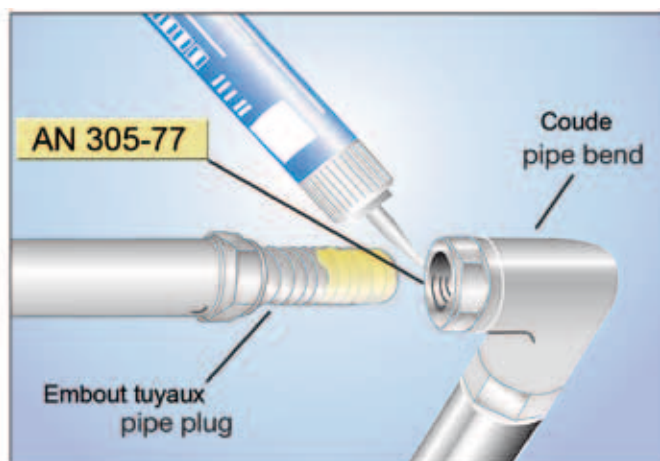
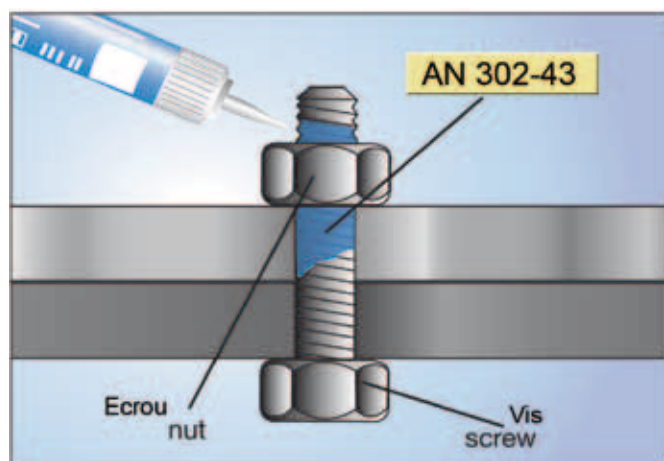
AN Fluid remains liquid as long as in contact with air. The cure starts when it, between the interfaces, comes into contact with metal under the absence of air.

The cure time is dependent on the selected type, the ambient temperature and the material.





Storage





AN products can be stored in the unopened original container for at least one year at room temperature. Keep away from heat sources and direct sunlight.

The air in Active materials the bottle/tube keeps the fluids liquid.



Data

AN 302-43 	Universal threadlocking type DVGW ² /KTW1,
AN 305-72 	Pipe and flange sealing (with PTFE), instant seal DVGW ² /KTW1,
AN 305-77 	Universal sealing type for pipes and fittings BAM3 approval for gaseous oxygen,
AN 306-41 	Retaining cylindrical assemblies

	AN 302-43 	AN 305-72 	AN 305-77 	AN 306-41 
Color	Blue	White	Yellow	Yellow
Strength	Medium	Medium	Medium	Medium
viscosity (25°C in mPa.s Brookfield)	Medium 2.000 - 7.000 mt	Medium 17.000 - 50.000ht	Higher 24.000 - 70.000 ht	Medium 550 nt
Threaded joints max.	M36	M80 R 3"	M80 R 3"	M20
Gap filling capacity (mm max)	0,25	0,40	0,50	0,12
Breakaway strength (N/m) *	17-22	7-10	18-22	12-15
Prevailing strength (N/m)**	8-12	2-4	10-14	17-22
Shearstrength** N/mm ² (DIN 54452)	9-13	4-6	6-13	8-12
Handling strength ***	10-20 min	20-40 min	15-30 min	10-20 min
Final strength ***	1-3 h	5-10 h	1-3 h	3-6 h
Temperature resistance	-60°C à 150°C	-60°C à 150°C	-60°C à 150°C	-60°C à 150°C

* Strength values based on M 10 screws, 8.8 grade, thickness of nut 0,8.d

** Static shear strength based on cylindrical parts of abt. Ø 13 mm, tolerance (D-d) = 0,05 mmm, l/d = 0,88

*** At room temperature