ADHESIVES & SEALANTS

Weiconlock AN 302-71 Threadlocker

Weiconlock AN 302-71 is a high quality grade of anaerobic adhesive designed specifically for thread and stud bolt locking and sealing applications. This grade is red in colour and has a medium viscosity that allows it to be used on thread sizes up to M 20.

AN 302-701 cures to create high strength bonds that will only be able to be broken with great force, by heating the part or through the use of solvents.

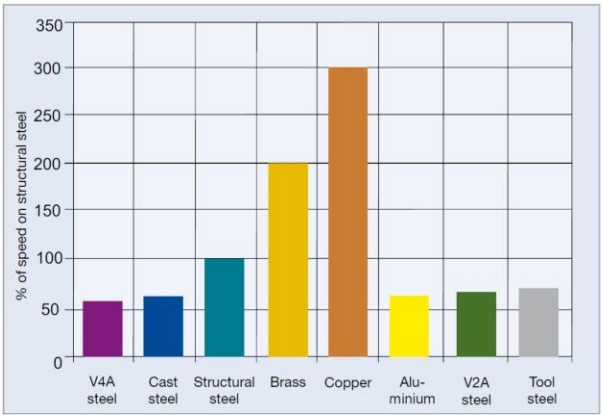
Properties

Colour	Red
For Threaded Joints Up To	M 20 (R ¾")
Viscosity at 25ºC Brookfield	500 MPa
Gap Filling Capacity (Max.)	0.15mm
Breakaway Strength (Thread)	28 – 35 Nm
Prevailing Strength (Thread)	50 – 65 Nm
Shear Strength (DIN 54452)	15 – 20 N/mm²
Handling Strength At Room Temperature	10 – 20 Minutes
Final Strength At Room Temperature	3 – 6 Hours
Temperature Resistance	-60ºC to +175ºC

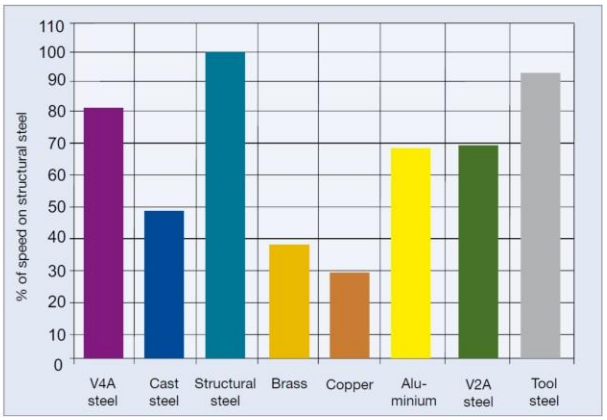
Weiconlock Adhesives General Information

All grades of Weiconlock are high quality anaerobic adhesives based on specialised methacrylate resins. While the grades differ in cure time, temperature resistance, cure strength, colour, viscosity and more; one thing that unites them is the fact that they only cure when in contact with metal and deprived of air. This special feature allows Weiconlock adhesives to be very easy to use as there's essentially no pot life.

As liquid adhesives, Weiconlock adhesives completely fill any gaps and thus protect against leakage and fretting corrosion. Once cured, these high quality adhesives form a shock and vibration resistant joint with excellent resistance to chemicals and solvents.



General Curing Speed of Weiconlock
Depending on Material



Compression Shear Strength of Weiconlock
Depending on the Metal (DIN 544521)

Visit: www.agaus.com.au

Phone: 1300 098 060

ADHESIVES & SEALANTS

Weiconlock AN 302-71 Threadlocker

Quality Endorsed Company

Weiconlock General Chemical Resistance Table

Acetaldehyde	+	Ethylene Dichloride	+	Perchloroethylene (Dry)	+
Acetate Solvent	+	Ethylene Glycol	+	Perchloric Acid (10%)	%+
Acetic Acid (10%)	%+	Fatty Acids	+	Permanganic	-
Acetic Acid (80%)	%O	Ferrous Sulphate	+	Peroxide Bleaching	+
Acetone	+	Formaldehyde (Cold)	+	Peroxy	-
Alcohols	+	Formic Acid (Cold)	+	Persulphuric (10%)	%+
Alkaline Solution	+	Freon	+	Phenol	+
Ammoniac Anhydride	-	Fuel Oil	+	Phenolic Resins	+
Ammonium Hydroxide	O	Fuming Nitric Acid	-	Phosphoric Acid 10% Hot	O
Amyl Acetate	+	Fuming Sulphuric Acid	-	Phosphoric Acid 10% Cold	+
Aniline	+	Gasoline	+	Phosphoric Acid 50% Hot	O
Aromatic Gasoline	+	Glycolic Acid	+	Phosphoric Acid 50% Cold	O
Aromatic Solvent	+	Glycerine	+	Phosphoric Acid 85% Hot	-
Ash Slurry	+	Grease Lubrication	+	Phosphoric Acid 85% Cold	O
Barium Sulphate	+	Hydrogen Bromide (10%)	%+	Phthalic	+
Battery Acid (10%)	%+	Hydrocyanic Acid (10%)	%+	Potash Alum	+
Benzene	+	Hydrogen	+	Potassium Acetate	+
Benzoic Acid	+	Hydrogen Peroxide Concentrate	O	Potassium Hydroxide	-
Boric Acid	+			Pyridine	+
Brake Fluid	+	Hydrofluoric Acid	-	River Water	+
Butadiene	+	Heptane	+	Sewage	+
Butyric (10%)	%+	Hydrazine	+	Sea Water	+
Butylaldehyde	+	Hydrochloric Acid	O	Silicone Oils	+
Butylamine	+	Isocyanate Resin	+	Sorbitol	+
Butyl Acetate	+	Isooctane	+	Steam Sterilisation	+
Butyl Chloride	+	Ketones	+	Styrene	+
Cadmium Sulphate	+	Lithium Chloride	+	Sulfones	+
Castor Oil	+	Malelc	+	Sulfonic Acids (10%)	%+
Cellulose Acetate	+	Melamine Resin	+	Sulphuric Acid (75-100%)	%-
Chinon	+	Mercaptan, Thioalcohol	+	Sulphur Mud Solution in Carbon Disulphide	+
Chlorine (Dry)	-	Methane	+		
Chlorine Alcohol	+	Methylamine	+	Sulphurous Acid	O
Chloramine	+	Methyl Ethyl Ketone	+	Sulphuric Acid (75%)	%O
Chlorine Dioxide	O	Methyl Acetate	+	Turpentine	+
Chlorinated Hydrocarbon	+	Mineral Oil, White	+	Thiourea	+
Chloroform (Dry)	+	Mine Water	+	Toulene, Methylbenzene	+
Coal Tar	+	Naphtha, Petroleum	+	Trichloroethane	+
Copper Chloride	+	Naphthalene	+	Trichloromethane	+
Copper Sulphate	+	Natronhydroxyd 20% hot	%O	Trioxane	+
Cold Salt Water	+	Natronhydroxyd 20% cold	%+	Vapor Pressure (Low)	+
Developer Liquid	+	Natronhydroxyd 50% hot	%-	Vaseline	+
Dichloroethylether	+	Natronhydroxyd 50% cold	%O	Vinyl Acetate	+
Diethyl ether	+	Natronhydroxyd 70% hot	%-	Wax	+
Diglycollic	+	Natronhydroxyd 70% cold	%O	Xylene, Dimethylbenzene	+
Dioxane (Dry)	+	Nitric Acid (20%)	%+		
Emulsified Oils	+	Oils	+		
Ethyl Acetate	+	Oxalic Acid	+		
Ethylenediamine	+	Paraffin Oil, Kerosene	+		

+ = Good Resistance
O = Preliminary Tests or Resistance Tests are Recommended
% = Weiconlock adhesives are resistant only up to the indicated concentration
- = Weiconlock adhesives are not suitable, or may be used only after thorough preliminary tests

Visit: www.agaus.com.au

Phone: 1300 098 060

Weiconlock AN 302-71 Threadlocker

Preparation of the Surface
In general, Weiconlock adhesives do not require special surface pre-treatment as slightly oil surfaces (e.g. on 'as received' parts) will be tolerated. However, best results will be achieved if Weiconlock is used on parts that are cleaned and degreased (Cleaner S may be ideal). If required, the parts should be slightly roughened.

Application
Weiconlock AN 302-71 is ready for use and should be applied evenly directly from the bottle/tube with the dispensing tip (avoid direct contact of tip with metal). On press fitted parts and larger cylindrical assemblies a thin uniform layer should be applied to both surfaces. In the case of blind threaded holes, dispense a sufficient quantity into the bore hole. On screws and bolts, apply AN 302-71 around the thread.

Do not pour any Weiconlock fluid that has had contact with metal back into the bottle. Even the smallest metal particles will cause the content of the bottle to cure. In series construction, the use of manual or automatic applicators is possible.

Physiological properties / health and safety at work
Weiconlock adhesives generally do not cause allergic reactions to the skin. However, in isolated cases where skin is continuously bruised or micro-lacerated sensitisation may occur. Therefore, extensive and direct contact with the skin should be avoided (e.g. by the use of Weicon Hand Protective Foam). For more information on this topic, please refer to the appropriate SDS.

Weiconlock Activator F
The cure time of all grades of Weiconlock adhesives can be reduced by pre-treating surfaces with Weiconlock Activator F which is recommended for all passive surfaces (such as high alloyed steel, chromate layers, plastics, ceramics, aluminium, zinc or nickel) and which is indispensable when working in low temperature (+10ºC and below) environments or when covering large gaps. On non-metallic surfaces, Weiconlock AN 302-71 is made effective by the activator.

Cure
Weiconlock remains liquid as long as it is in contact with the air. Curing starts when Weiconlock is in contact with metal and deprived of air. Observable cure time is influenced not only by the type of Weiconlock, but also the material(s) it is exposed to and the environmental temperature.

Dismantling
Weiconlock AN 302-71 cures with high strength. Connections locked and sealed with this grade may be disassembled by heating to a minimum of 300ºC. Cured residues of Weiconlock can also be removed mechanically or with Weicon Sealant and Adhesive Removed.

Storage
Weiconlock AN 302-71 can be stored in its unopened original container for at least 12 months at room temperature. Keep away from heat sources and direct sunlight.

Availability
Weiconlock AN 302-71 is available in 10ml tubes as well as 20ml and 50ml Pens.

Rev: Jun. 2013 V001457 0000R00715AGDOCg