

# EPOLOCK™ 6700

## Two component epoxy adhesive

For high temperature and chemical resistance



EPOLOCK 6700 is a Two-Component epoxy coating designed to provide long-term corrosion and chemical resistance to equipment operating in continuous immersion at temperatures up to 60°C. The adhesive formulation is designed so that it can be used as a coating with excellent resistance to corrosion and wear. It can also be used as a high-strength structural adhesive for gluing all kinds of metal parts (to create a load-bearing shim) or to repair them.

### APPLICATIONS

- Repairing all types of pumps
- Repair of butterfly and gate valves
- Repair of connections and tees
- Repair of heat exchangers and its components, including tube sheets

### KEY PROPERTIES

- ✓ Excellent temperature resistance up to 150°C
- ✓ Low shrinkage
- ✓ Excellent chemical resistance
- ✓ Heat cure epoxy adhesive

### PRODUCT DATA

Characteristics	2200 / A	2200 / B	Mixed A/B
Color	Black	White	Silver
Density (kg/m <sup>3</sup> )	2594	1038	2310
Gel time(min)*	-	-	30
Shelf life (year)	2	2	-

- \* 150 grams at a temperature of 25 degrees Celsius

### INSTRUCTIONS

Before mixing, make sure that the bonding surfaces are clean and dry. The strength and durability of a bonded joint are dependent on proper treatment of the surfaces to be bonded. At the very least, joint surfaces should be cleaned with a good degreasing agent such as acetone, isopropanol (for plastics) or other proprietary degreasing agents in order to remove all traces of oil, grease and dirt. Low grade alcohol, gasoline (petrol) or paint thinners should never be used. Completely mix the hardener with the resin at the proper ratio.

Mix ratio	Parts by weight
6700 / A	11
6700 / B	1

Apply a uniform layer to both bonding surfaces and draw both parts firmly together.

### Time required to reach the final properties in terms of temperature

Temperature (° C)	First cook	Machining	Ultimate mechanical strength	Exposure to fluid
5	12 Hours	18 Hours	7 Days	10 Days
10	8 Hours	12 Hours	3 Days	5 Days
20	4 Hours	6 Hours	1.5 Days	2 Days
30	2 Hours	3 Hours	18 Hours	1 Days

\* The values presented in the above table are for the adhesive applied with a thickness of 6 mm. In larger thicknesses of adhesive, the above values decrease and increase for smaller thicknesses.

### Properties of cured adhesive

In the table below, the lap shear strength of the adhesive cured with different materials is mentioned. All tests were taken according to the ASTM D 1002 standard.

JOINTING MATERIAL	STRENGTH (MPA)
STEEL/STEEL	17
stainless steel	19

\* All surfaces are roughened and degreased before applying adhesive

# EPOLOCK™ 6700

## Two component epoxy adhesive

For high temperature and chemical resistance



EPOLOCK 6700 is a Two-Component epoxy coating designed to provide long-term corrosion and chemical resistance to equipment operating in continuous immersion at temperatures up to 60°C. The adhesive formulation is designed so that it can be used as a coating with excellent resistance to corrosion and wear. It can also be used as a high-strength structural adhesive for gluing all kinds of metal parts (to create a load-bearing shim) or to repair them.

### Pull Off adhesion

In the table below, the Pull Off test results according to the ASTM D 4541 standard is expressed.

STRENGTH (MPA)	Material
Steel	25

\* All surfaces have been sandblasted and degreased before applying adhesive

### Chemical Resistance

After fully curing, the adhesive is resistant to most inorganic acid and alkaline fluids up to 20% concentration. It is also resistant to hydrocarbon materials, fossil fuels and types of oils.

### Hard

According to the ASTM D 2240 standard, the obtained hardness is 86 D.

### Heat distortion temperature (HDT) temperature resistance of glue

This test was conducted based on the ASTM D 648 standard.

Cooking Temperature (°C)	HDT (°C)
100	90

### Storage conditions

EPOLOCK 6700 adhesive is supplied in completely sealed cans and its maximum storage time is 2 years at a temperature of 25 degrees centigrade. The expiration date of the adhesive is written on the cans. EPOLOCK 6700 adhesive is available in packages of 500 grams and more depending on the customer's needs.

### Storage conditions

- ✓ Keep out of reach of children.
- ✓ EPOLOCK 6700 Stone Adhesive has a slight, nonhazardous.
- ✓ In case of contact with skin, flush thoroughly with water.