

K A U F M A N

PRODUCT
INFORMATION

KAUFMAN
PRODUCTS
INC.

3811 CURTIS
AVENUE

BALTIMORE,
MARYLAND
21226-1131

410-354-8600
800-637-6372
www.kaufman
products.net

SurePoxy 738

Description

SurePoxy 738 is a two-component, 100% solids, metal-reinforced epoxy gel compound that may be used to repair virtually any metal surface that has been damaged, worn, or cracked. Once cured, SurePoxy 738 is readily machinable.

Uses

While there are many potential ways to use SurePoxy 738, some of the most common applications include: emergency repairs or as part of planned maintenance to equipment such as worn and/or damaged pump shafts, cracked pumps or valve casings, scored hydraulic rams, worn bearing housings, damaged flanges, leaking tank seams, worn keyways, and cracked engine blocks.

Advantages

- Excellent adhesion to metals
- Machinable
- May be drilled, tapped, or sanded
- Chemical resistance
- USDA compliant
- Solvent free
- No shrinkage

Packaging & Yield

2.2 lb. unit (1 kg)

6.6 lb. unit (3 kg)

Directions

Surface Preparation-Mechanical Abrasion

All oil and grease must be removed from the surface using an appropriate cleaning agent such as MEK. All surfaces must be mechanically abraded using handheld grinders to SSPC SP3 ST3 or ISO 8501/4 ST3. Once abraded, the surface must be degreased and cleaned using MEK or a similar material. All surfaces must be coated before gingering or oxidation occurs.

Surface Preparation-Abrasive Blast Cleaning

All oil and grease must be removed from the surface using an appropriate cleaning agent such as MEK. All surfaces must be abrasive blasted to SSPC SP10/NACE 2 or ISO 8501/4 Standard SA2.5 with a minimum blast profile of 75 microns (3 mils) using an angular abrasive. Once blast cleaned, the surface must be degreased and cleaned using MEK or a similar material. All surfaces must be coated before gingering or oxidation occurs.

Physical Properties, Neat @ 75°F:

Color:	Base	Dark Grey
	Activator	Light Grey
	Mixed	Medium Grey
Mixing Ratio:	By Weight:	5:1
	By Volume:	3:1
Density, Mixed:	2.46	
Solids Content:	100%	
Sag Resistance:	nil at 25 mm	

Mechanical Properties:

Tensile Shear	2,630 psi.
(ASTM D-1002 on abrasive blasted mild steel with 75 micron profile.)	
Pull-Off Adhesion	3,480 psi.
(ASTM D-4541 on abrasive blasted mild steel with 75 micron profile.)	
Compressive Strength	15,300 psi.
(ASTM D-695)	
Flexural Strength	10,000 psi.
(ASTM D-790)	

Mixing

Prior to mixing SurePoxy 738, make certain that the base component is preconditioned to between 60-77°F. The surface and ambient temperature must be above 41°F. Once both conditions are met, you may proceed with mixing SurePoxy 738.

When mixing a complete unit of SurePoxy 738, dispense the base and activator components onto a clean mixing surface. Mix the two components together until you have a streak-free mixture that is medium gray on the mixing board. Ensure that there is no unmixed material or the spatula or mixing board. If mixing a partial unit, using a spatula place 3 equal measures of the base unit onto the mixing board, and then clean the spatula thoroughly. Then take one equal measure of the activator unit and place alongside the base material. Mix the two components together until the mixture is streak-free, medium grey, and free of unmixed material on the board or spatula. Whether a full unit or partial unit is mixed, SurePoxy 738 must be used within thirty minutes at 68°F.

For professional use only. Not for sale or use by the public.

LIMITED WARRANTY: We warrant our products to be of good quality and will replace material proved defective. Satisfactory results depend not only upon quality products, but also upon many factors beyond our control. Therefore, except for such replacement, there are no warranties which extend beyond the description on the face hereof, and Kaufman Products, Inc. makes no warranty or guarantee, expressed or implied, including warranties of fitness or merchantability, respecting its products, and Kaufman Products, Inc. shall have no other liability with respect hereto. The user shall determine the suitability of the product or the intended use and assume all risks and liability in connection thereto. Our salespeople, distributors, and their salespeople have no authority to change the printed recommendations concerning the use of our products.

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Application

Using a spatula or applicator tool, apply SurePoxy 738 to the properly prepared surface. Ensure that SurePoxy 738 is pressed firmly into any holes, scars, or cracks. Once the repair has been completed, smooth off any imperfections using a gloved hand. Where a machined finish is required, the repair areas should be overfilled by up to 60 mil (1.5 mm) and once hardened machined using a surface cutting speed of 200 ft/minute and a feed rate of 50 thou/rev initially and 10 thou/rev for finishing.

Coverage Rates

2.2 lbs. (1 kg) of fully mixed material will generate the following coverage rates:

0.406 m ² at 1mm	4.3 ft ² at 40 mil
0.203 m ² at 2 mm	2.2 ft ² at 80 mil
0.135 m ² at 3 mm	1.45 ft ² at 1/8"

Cure Times

At 68°F, once applied SurePoxy 738 must be allowed to harden for the times indicated below before being subjected to the conditions indicated. These times will be extended at lower temperatures and reduced at higher temperatures because the chemical reaction is greatly influenced by temperature conditions.

Usable Life	30 minutes
Machining and Light Loading	2 hours
Maximum Overcoating Time	6 hours
Full Cure	3 days

For Optimum Performance

After an initial curing period of at least four hours at 68°F, raising the cure temperature progressively to 140-212°F for up to eight hours will result in improved mechanical, thermal, and chemical resistance properties.

Over-Coating Times

Minimum	As soon touch dry
Maximum	Less than 6 hours

When the maximum over-coating time is exceeded, then SurePoxy 738 should be allowed to harden before being abraded or flash blasted to remove surface contamination.

Storage Life

One year if left un-opened and stored correctly in normal dry conditions between 60-86°F.

Precautions

Pay strict adherence to directions regarding temperature requirements. Use when temperatures are between 41-90°F, and relative humidity is less than 90%. *Read the complete Safety Data Sheets on both components of SurePoxy 738 before using.*

Technical Information

Test results were achieved under laboratory conditions. Statistical variations will occur based upon mixing methods, temperature & humidity, test methodology, site conditions, curing conditions, application methods, and equipment