

A.W.F. E.M. LIQUID METAL

AWF Liquid Metal is a high performance synthetic metal compound specifically developed for resurfacing and reforming damaged metal machinery and equipment.

E.M. Liquid Metal can be applied to any damaged component and provides an excellent slip resistant surface in combination with AWF Bauxite Aggregates and is ideal for drive rollers and brake test rollers where grip is essential.



Preparation

Heavy contamination due to oil or grease must first be removed using AWF All Purpose Cleaner. All loose material, rust and surface contaminants including existing coatings, must be removed and the surface roughened by using an angle grinder, needle gun or abrasive blasting. Where grinder or needlegun is used the surface must be cross-scored to improve adhesion. Care must be taken when angle grinding to avoid polishing rather than roughening metal surfaces. Where possible, abrasive blasting is the preferred surface preparation especially fluid flow repairs. Surfaces should finally be carefully degreased using AWF All Purpose Cleaner.

Parts (for example threads or bearing surfaces) which remain in position during application but must not adhere to E.M. Liquid Metal must be coated with AWF Release Agent



Mixing Ratio

AWF E.M. Liquid Metal is a two part material consisting of a Base & Activator resin which must be mixed together prior to use. Measure two volumes of the base resin and one volume of the activator resin into a clean container. The two resins should be thoroughly mixed together to produce a completely streak free material. The mixed material should be used within 40 mins of mixing at 20°C. This time will be reduced at higher temperatures and extended at lower temperatures

<u>Mixing Ratio:</u>	<u>Base</u>	<u>Activator</u>	
	2	1	by volume
	5	1	by weight



Curing Time

Drying, Curing times @ 20°C

Initial set:	4 hours
Min overcoating:	4 hours
Max overcoating:	48 hours
Machining:	8 hours
Full mechanical:	5 days



Pot Life

Once you have mixed the Base & Activator together, you have approximately 40 minutes to use the mixed material

APPLICATION DETAILS



AWF E.M. Liquid Metal should be applied by stiff brush or squeegee to the prepared area as soon as possible after suitable preparation, and certainly the same day to prevent flash rusting. If flash rusting does occur, the surface should be re-prepared.

On deeply pitted surfaces, E.M. Liquid Metal must be worked into the surface to ensure complete “wetting out” and prevention of air entrapment.

When a two coat application is specified the second coat can be applied a minimum of 4 hours after the first application. The maximum overcoating time is two days at 20°C

Where a slip resistant system is required, AWF Bauxite coarse or fine should be scattered into freshly applied E.M. Liquid Metal. All equipment must be cleaned immediately after use with AWF Universal cleaner.



Theoretical coverage rate

1.5m²/ per kg at 250 microns dft
(16ft²) per kg at 10 mils)

Recommended film Thickness

Wet: 250 microns (10mils)

Dry: 250 microns (10mils)

Physical Constants:

<u>Appearance</u> Base:	Coloured Paste
Activator:	Amber Liquid

Volume Solids	100%
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V.O.C.	Nil
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This product should not be used if the temperature or the surface to be coated falls below 5°C.



Use within 5 years of purchase. Store in original sealed containers at temperatures between 5°C and 30°C.



As long as good practice is observed AWF E.M. Liquid Metal can be safely used.

Protective gloves should be worn during use. A fully detailed Material Safety Data Sheet is available on request.

If you have any questions or queries regarding this data sheet or the application of this product, please contact us before you use the product.