



TECHNICAL DATA SHEET



METAL-TECH S.G.

Two Component Rapid Curing Epoxy Metal Repair Compound

Thortex Metal-Tech S.G. is a high performance, rapid curing synthetic metal repair compound in the form of a stick which has been specifically developed for on site repairs to metal components such as leaking pipes, tanks, ducts, radiators etc.

The **Thortex Metal-Tech S.G.** formulation is based on a unique epoxy resin system co-reacted with an organo sulphur / amine blend which are then interspered with specially chosen pigments and fillers which allow the base and activator components to be packed in intimate contact with each other. The reaction only occurs when the two components are hand mixed and the resultant blend produces a repair material with high physical and mechanical strength.

Before proceeding, please read the following information carefully to ensure that the correct application procedure is fully understood.

SURFACE PREPARATION

Heavy contamination due to oil or grease must be removed using **Thortex Universal 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 grinding is used, the surface should be cross-scored to improve adhesion. Care must be taken, when angle grinding, to avoid polishing rather than roughening metal surfaces.

Surfaces should be carefully degreased again using **Thortex Universal Cleaner**. Cloths should be frequently changed to avoid spreading contamination. On deeply pitted surfaces or porous castings, **Thortex Universal Cleaner** should be worked into the surface by brush and washed off using excess cleaner.

Surfaces which must remain in position during application but must not adhere to **Thortex Metal-Tech S.G.** must be coated with **Thortex Release Agent**.

MIXING

Before mixing, hands should be treated with a suitable barrier cream or lightweight disposable gloves should be worn.

Sufficient product to complete the repair should be cut or broken from the stick. This should then be twisted and kneaded until a uniform colour is achieved with no streaks. The two components are colour coded to ensure complete mixing is achieved when the colour is uniform.

Thortex Metal-Tech SG should be used within 6 minutes of mixing at 20°C (68°F).

These times will be reduced at higher temperatures or extended at lower temperatures.

APPLICATION

Prepared surfaces should be dry. The mixed material should be pressed firmly onto the prepared area, working the material into any cracks and surface defects.

When **Thortex Metal-Tech SG** is being used to repair leaking pipes, the flow through the pipe should be discontinued until the repair is made and the **Thortex Metal-Tech SG** is set. Any leaking fluid must be wiped from the prepared surface to render the surface as dry as possible before undertaking the repair.

All equipment must be cleaned IMMEDIATELY after use with **Thortex Universal Cleaner**.

Once the **Thortex Metal-Tech SG** has reached initial set the material can be separated from surfaces treated with **Thortex Release Agent**.

Volume Capacity

66 cc (4 cu. in) per unit

Detailed working recommendations are available from the Technical Centre on request.

PHYSICAL CONSTANTS

Mixing Ratio	Supplied ready to use.	
Appearance	Concentric coloured stick of putty consistency.	
Drying & Cure times at 20°C/68°F	Usable Life	6 minutes
	Initial Set	15 minutes
	Machining	30 minutes
	Full Mechanical	2 hours
Volume Solids	100%	
V.O.C.	Nil	
Food Contact	Meets USDA requirements for incidental food contact.	
	Meets FDA requirements CFR 21.175.300 for food contact	
Shelf Life	Use within 5 years of purchase. Store at temperatures between 5°C (40°F) and 30°C (86°F).	

PHYSICAL PROPERTIES

Flexural Strength	230kg/cm ² (3250 psi)
ASTM D790	
Compressive Strength	350kg/cm ² (5000 psi)
ASTM D695	
Tensile Shear Adhesion	45kg/cm ² (650 psi)
ASTM D1002	(Grit Blasted)
Heat Distortion	40°C (96°F)
ASTM D648	
Hardness (Shore D)	85
ASTM D2246	
Corrosion Resistance	5,000 hrs
ASTM B117	

HEALTH AND SAFETY

As long as normal good practice is observed **Thortex Metal-Tech S.G.** can be safely used.

A fully detailed **Material Safety Data Sheet** is either included with the material or is available on request.

PACKAGING

Supplied in 0.125 kg units.

The information provided in this Product Data Sheet is intended as a general guide only and should not be used for specification purposes. The information is given in good faith but we assume no responsibility for the use made of the product or this information because this is outside the control of the company. Users should determine the suitability of the product for their own particular purposes by their own tests.



www.thortex.co.uk

Thortex Division of E. Wood Ltd.

Standard Way, Northallerton, N. Yorks. U.K. DL6 2XA

Tel: +44(0)1609 780170 Fax: +44(0)1609 780438 & 777905

E Mail: thortex@ewood.co.uk

Buy online: www.thortex.co.uk/shop

FOR FURTHER INFORMATION PLEASE CONTACT