



# TECHNICAL DATA SHEET

## FLEXI-TECH 80 F.G.

Two Component Solvent Free Fluid Grade Elastomer



**Thortex Flexi-Tech 80 F.G.** is an 80 Durometer high performance fluid elastomer which has been specifically developed for casting and molding of rubber components and is suitable for use on impellers, chutes, hoppers valves, rollers, gaskets, cables, hoses, etc.

The **Thortex Flexi-Tech 80 F.G.** formulation is based on a complex blend of polyols and polyesters in combination with amine catalysts and activators to product a cold vulcanizing product with outstanding mechanical strength.

The properties of **Thortex Flexi-Tech 80 F.G.** have been designed to match factory produced rubbers.

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

### SURFACE PREPARATION

All existing dirt, oil and grease should be removed and the surface wiped with **Thortex Universal Cleaner**.

Any areas of frayed or fragmented rubber should be cut away to provide a sound repair area.

Smooth surfaces, including metals, should be mechanically etched to produce a good profile, with abrasive blasting being preferred for metal substrates. Rubber surfaces are best roughened using a stiff wire brush / comb.

Edges of repair areas of belts, hoses, tires, etc. should be undercut.

All loose dust and particles must be removed and the surface given a final wipe with **Thortex Universal Cleaner**.

On certain repairs such as gaskets and castings where one surface is not required to bond to the **Thortex Flexi-Tech 80 F.G.**, these surfaces should be treated with **Thortex Release Agent**.

### PRIMING

All areas to be repaired or resurfaced should be first primed with **Thortex Flexi-Tech Primer**.

The primer should be applied with a soft bristled brush to give an even, but low coating thickness, taking care to avoid ponding of the primer.

The primer should be allowed a minimum of 60 minutes and a maximum of 8 hours at 20°C (68°F) before applying the **Thortex Flexi-Tech 80 F.G.**

### MIXING

**Thortex Flexi-Tech 80 F.G.** is a two component material which must be mixed together prior to use.

The contents of the base container should be transferred to the mixing container provided. The contents of the activator should be added to the base with continuous stirring to produce a streak free viscous liquid.

Where less than full unit mixes are required it is essential that the product be mixed accurately weighing out the quantities of base and activator.

Thorough mixing is extremely important, and once the material appears mixed, a further period of mixing should be carried out to ensure there is no unmixed material.

**APPLICATION**

For casting / molding the mixed product should be poured into the prepared mold, the filled mold should be gently vibrated to aid the release of trapped air.

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

**Volume Capacity**

922cc (56.3 cu ins) per kilo

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

**PHYSICAL CONSTANTS**

Mixing Ratio	Base	Activator	
	1	1.4	By volume
	3	4	By weight

Appearance	Base	Activator
	Black Viscous Liquid	Clear Viscous Liquid

**Drying & Cure Times**

At 20°C (68°F)	Usable Life	15 minutes
	Initial Set	1 hour
	Machining	16 hours
	Full Mechanical	3 days

Volume Solids	100%
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V.O.C.	Nil
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**Shelf Life** Use within 12 months of purchase. Store in original sealed containers at temperatures between 5°C (40°F) and 30°C (86°F).

**Food Contact** Meets USDA requirements for incidental food contact

FOR FURTHER INFORMATION PLEASE CONTACT

**PHYSICAL PROPERTIES**

<b>Tensile Strength</b> ASTM D412	14.5 N/mm <sup>2</sup> (2100 psi)
<b>Tear Strength</b> ASTM D624	53.2 N/mm <sup>2</sup> (300 pli)
<b>Elongation</b> ASTM D412	500%
<b>Shore A Hardness</b> ASTM D2240	80
<b>Di-electric Strength</b> ASTM D149	16 volts/micron (400 volts/mil)
<b>Peel Adhesion</b> <b>(concrete and steel)</b> ASTM D903	9kg/cm (50 pli) – cohesive failure in Flexi-Tech

**HEALTH AND SAFETY**

As long as normal good practice is observed **Thortex Flexi-Tech 80 F.G.** can be safely used.

Protective gloves should be worn.

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

**PACKAGING**

Supplied in 0.500 kg and 2kg packs.

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.

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