

Technical Data Sheet

Cable Fill 123-74-1 (Slow Cure)

Cox Sales Company 40 Durometer Addition Cure
Silicone Elastomer

Product Description

The 123-74-1 specification covers the engineering requirements for a two component platinum-catalyzed elastomer that cross links at room temperature. The silicone elastomer is used as a void filler and blocking compound in electro-mechanical cables. The cured rubber has excellent mechanical properties and good shelf life stability.

Key Features

- Good Physical Properties
- 10:1 mix ratio
- Machine or hand mix

Typical Properties

UNCATALYZED PROPERTIES	
Mix Ratio	10:1 by weight
Mix Ratio	10:1 by volume
BASE	
Base Appearance	Beige
Base Viscosity, cps	45,000 – 65,000
Base Specific Gravity, g/cm ³	1.31
CATALYST	
Catalyst Appearance	Dark Blue
Catalyst Viscosity, cps	1,000 – 2,000
Catalyst Specific Gravity, g/cm ²	0.97

Typical Properties Continued

CATALYZED PROPERTIES - 123-74-1	
PROPERTY	
Catalyzed Color	Blue
Catalyzed Viscosity, cps	55000
Pot Life ⁽¹⁾ (minutes)	60 - 120

TYPICAL CURED PROPERTIES (3 DAYS @ 25C)	
Durometer, Shore A	38 - 47
Tensile Strength, psi	695
Elongation, %	480
Tear B	75
Linear Shrinkage, %	<0.1
Dielectric Strength, Volts/mil	450
Dielectric Constant	3.84
Dissipation Factor	0.87
Volume Resistivity	9.72491×10^{14}
Useful Temperature Range	-60C to 204C

(1)Pot Life is defined as the time at which the viscosity has doubled.

Cure Characteristics

The curing process begins as soon as the catalyst is mixed with the base. Under normal temperature (25C) and humidity (50% RH) conditions, the material will cure as described in the data above. Because this system is sensitive to heat and humidity, a change in cure speed may be seen if one or both of these variables are altered. Any large difference in temperature (+/-5C) or humidity (>60-70%) may change the cure profile of the material. For best results, 123-74-1A and 123-74-1B components of the **same lot number** should be used.

Mixing and De-aeration

The following procedure should be followed for obtaining optimal performance.

Charge 100 parts, **by weight**, of 123-74-1A and 10 parts, **by weight**, of 123-74-1B into a clean, compatible metal or plastic container. **When hand mixing; accurate weighing of components on a suitable scale is essential for optimal product performance.** Shake the catalyst well before use. The volume of the container should be 3-4 times the volume of the material to be mixed. This allows for expansion of the 123-74-1 as it de-gasses.

Mix thoroughly by hand or with mixing equipment while minimizing air entrapment until a homogeneous mixture is obtained. This will occur when the material takes on a uniform color with no visible striations. Once mixing * is complete it is recommended that the material be de-aired 2-3 times by intermittent evacuation for a few minutes to minimize any imperfections due to bubbles in the cured material. Typically

after releasing the vacuum 2-3 times the mass will collapse on itself at which time the vacuum should be left on only 2-4 minutes longer.

*** Machine mixed material does not normally need to be de-aired.**

Shelf-life and Storage

123-74-1A and 123-74-1B should be stored in their original, sealed containers in an environment that does not exceed 90F. Under these conditions the expected shelf-life of the material is 12 months.

Not for Product Specification

The technical data listed herein is provided as a reference only and **is not** intended as sales specifications. For sales and technical assistance or for product recommendations, please call (540) 345-2636.

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