

DESCRIPTION

Ax-Sil 4240 is a translucent, high strength, addition cure, two component silicone rubber compound. This product cures at room temperature or can be heat accelerated if a shorter curing time is desired. Ax-Sil 4240 is an ideal silicone rubber for reproducing intricate details. It also does an excellent job of maintaining the close tolerances necessary for pattern shops, model shops, or stereolithography mold making.

PROPERTIES

- Excellent dimensional stability
- High tear resistance
- Excellent release properties
- Good resistance to polyurethanes
- Low linear shrinkage
- Thick sections cure well

TYPICAL PROPERTIES AS SUPPLIED				
Composition		Ax-Sil 4240 RESIN	Ax-Sil 4240 CATALYST	MIXED
Mix ratio by weight Mix ratio by volume		100	10	-
Aspect		Thick pourable liquid	Thin pourable liquid	Thick pourable liquid
Color		Translucent	Translucent	Translucent
Viscosity at 25°C (mPa.s)	ASTM D2196	50,000		40,000
Pot life at 25°C (min)		-	-	120

TYPICAL PROPERTIES OF CURED RUBBER (1)			
Specific gravity at 23°C			1.08
Hardness	ASTM D2240	Shore A	38
Tensile strength	ASTM D412	psi/(MPA)	920 (6.3)
Tensile elongation	ASTM D412	%	340
Tear resistance	ASTMD624, DIE B	ppi/(N/mm)	120 (21)
Coefficient of Thermal Expansion		in/in/°F/(°C)	1.4/(2.5) x 10 ⁻⁴
Linear shrinkage (%)		24 hours 7 days	<0.1 <0.1

(1) Average values obtained on standard specimens cured 24h at 25°C (77°F).

Cure time may be accelerated by curing 2-3h at 49-65°C (120-150°F) - WILL AFFECT PROPERTIES.



Ax-Sil 4240

Translucent Silicone Elastomer Medium Hardness Shore A 40

Technical Data Sheet

PROCESSING CONDITIONS

- Mix each component separately until a homogenous mixture is obtained, then thoroughly mix resin with catalyst according to indicated mix ratio. Blend completely until color is thoroughly blended with no streaks showing.
- Be certain to scrape sides and bottom of container occasionally while mixing.
- If using a mechanical mixer do not exceed 150 rpm.
- Vacuum mixed product in a container that will allow for at least 500% expansion. Use a pump that will achieve 29 inches of vacuum. Keep mixture under vacuum for 5 to 10 minutes after material has settled.
- Minimize air bubbles by pouring into mold in a steady stream, moving from one end of mold to the other.
- Mold release may be used.
- Allow mixture to cure 16-24 hours at 75°F / 24°C before demolding. For optimum results, allow mixture to cure for an additional 24 hours.
- To avoid vulcanization, do not exceed the indicated time and ratio.

STORAGE CONDITIONS

Shelf life is 18 months when stored at 25°C (77°F) in original, unopened containers.

HANDLING PRECAUTIONS

Normal health and safety precautions should be observed when handling these products:

- Ensure good ventilation
 - Wear gloves and safety glasses
 - This product contains an organic material, which may irritate skin or eyes upon contact. If eye contact occurs, flushing with water for at least 15 minutes should relieve discomfort. If irritation persists, seek medical attention.
- For further information, please consult the Material Safety Data Sheet.

GUARANTEE

The information presented in this technical data sheet are based on results of tests conducted under precise conditions. It is the responsibility of the user to determine the suitability of AXSON products, under their own conditions, before commencing with application. AXSON refuses any guarantee concerning the compatibility of a product with any particular application. AXSON disclaims all responsibility for damage from any incident which results from the use of these products. The guarantee conditions are regulated by our general sale conditions.