

BLUESIL CATA HI PRO BLUE

Description	BLUESIL CATA HI-PRO BLUE is an organotin carboxylate with additives. It is the standard catalyst
	for the BLUESIL V-1060 series of moldmaking rubber compounds. BLUESIL CATA HI-PRO BLUE
	provides deep section cure capability, extremely fast hardness development and long library life

to rubber.

Examples of applications

• Catalyst for fast demolding of condensation cure rubber compounds, specifically BLUESIL V-1060 series.

Key benefits

Please consult your local ELKEM SILICONES sales office.

Typical properties

	BLUESIL HI PRO BLUE
Pot life ASTM D 412	2.5 h
Hardness ISO 868	22.5 sh.A
Color ASTM D 412	Blue

Color	Blue
Consistency	Pourable
Viscosity, cP. (mPa.s)	90
Specific Gravity	1.00
Flash Point, closed cup	>204°F(96°C)

TYPICAL CATALYZED PROPERTIES

Mixed at 24°C (75°F) and 50% R.H. with BLUESIL V-1065A

properties	Mixed at 24°C (75°F) and 50% R.H. with BLUESIL V-1065A
Color	Blue
Mix Ratio, A:B (by weight)	10:1
Pot Life, hours ¹	2
24 Hour Thick Section Hardness, Shore A ²	28
Viscosity, cp. (mPa.s)	43,000
Demold Time, hrs	6

EXAMPLE OF CURED RUBBER, with BLUESIL V-1065A,

Cured 7 days at 24°C (75°F) and 50% RH

Property	Test Method	Value
Color		Blue
Hardness, Shore A	ASTM D2240	30
Tensile Strength, psi (N/mm²)	ASTM D412	630 (4.3)
Elongation, %	ASTM D412	430
Tear Resistance, ppi (N/mm)	ASTM D624, Die B	100 (17.5)

(1) Time at which material gels. (2) 0.5 in. (1.27 cm) thick cup specimen Please note: The typical properties are not intended for use in preparing specifications. Please contact our local Sales Department for assistance in writing specifications.



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Instruction of use

- Stir the base (Part A) well before use (except when machine dispensing).
- 2. Shake the catalyst container (Part B) well before use.
- 3. Weigh the desired amount of base into a clean mixing container. Tip the container and roll the base all the way around the side wall up to two inches from the top. This will prevent the catalyst from becoming absorbed into the container. It is recommended that the container be filled to not more than 1/3 the container depth to allow sufficient room for expansion during the deaeration procedure.
- 4. Weigh the proper amount of catalyst into the container. Mix the base and catalyst together by stirring with a stiff, flat ended metal spatula until a uniform color is obtained. Scrape the container walls and bottom well to insure a thorough mix.
- 5. Place the container into a vacuum chamber and evacuate the entrapped air from the mixture using a vacuum pump capable of achieving 29 inches of mercury vacuum. The mixture will rise, crest and then collapse in the container. Interruption (bumping) of the vacuum may be necessary to prevent overflowing the container. Keep the mixture under full vacuum for 2-3 minutes after the material has receded in the container.
- 6. Bleed air slowly into the vacuum chamber. When the chamber is at atmospheric equilibrium, remove the cover plate and take out the container.
- 7. Pour the deaired material <u>slowly</u> in a steady stream from one end of the mold box so that the material flows evenly over the pattern. This should minimize entrapment of air bubbles under the flowing material. A "print" coat may be poured first over the pattern which will also help reduce the possibility of entrapping air on the pattern and in the cured rubber. A mold release (petroleum jelly) may be applied on the pattern first to improve release.
- 8. Allow the rubber to cure for 16-24 hours at 75±5°F (24°C) before removing the cured rubber mold from the pattern. Heat acceleration is not recommended with this product.
- 9. For best results, allow the mold to air cure an additional 24 hours before using it in production. Full cure is achieved in 3-7 days.
- 10. For bonding to wood or metals, use BLUESIL V-04 primer. Follow recommendations on the BLUESIL V-04 technical data sheet for best results.

PROCESSING INFORMATION

CATALYZED PROCESSING PROPERTIES ARE AFFECTED BY TEMPERATURE AND HUMIDITY VARIATION

- 1. For best results, mix and cure the material at 75°F (24°C) and 50% relative humidity.
- Higher temperature and humidity will <u>decrease</u> the work life and pot life of the material.
 The faster cure will also affect the flow properties. Refrigeration of the base prior to use in hot environments has shown to improve the handling properties of this material.
- Lower temperatures and humidity will <u>increase</u> the work life and pot life of the material.
 The slower cure will increase the flow time. Cure temperatures below 68°F (20°C) are not recommended and have been found to cause a reduction in final cure hardness and properties.
- 4. It is important that the catalyst containers are <u>tightly closed after use</u>. Catalyst exposed to air for extended periods of time will hydrolyze (cure). An indication of hydrolysis is a film or crust formation on the surface of the catalyst. The use of hydrolyzed catalyst is not recommended and may cause incomplete cure.

Regulation	Please consult your local ELKEM SILICONES sales office.	
Limitations	Please consult your local ELKEM SILICONES sales office.	
Packaging	 BLUESIL HI PRO BLUE is available in Box of 2 KG (4.41 LB) Pail of 20 KG (44.1 LB) Drum of 180 KG (396.9 LB) 	
Storage and shelf life	When stored in its original packaging: BLUESIL HI PRO BLUE may be stored at a temperature below 40°C / 104°F for up to 24 months from its date of manufacturing.	



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	Comply with the storage instructions and expiration date marked on the packaging. Beyond this date, Elkem Silicones no longer guarantees that the product meets the sales specifications.
Safety	Please consult the Safety Data Sheet of: BLUESIL HI PRO BLUE

Visit our website www.elkem.com/silicones/

Warning to the users

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