

Silbione® HCRU 4125 HC & Silbione® HCRU 4135 HC

October 2017

High Consistency Silicone Elastomer

Description Elkem Silicones Health Care Grade HCR-U High Consistency Silicone Elastomer is an uncatalyzed silicone base elastomer that may be used in processes where high strength molded; calendared and extruded parts are desired in the Shore A durometer range of 25 and 35. By addition of peroxide catalysts such as dichlorobenzoyl peroxide, (TS-50) Benzoyl Peroxide (BP), Dicumyl Peroxide (Dicup), and ditertiarybutylhexyl peroxide (Varox), the silicone base can be cured at elevated temperatures to a high strength, high elongation, resilient elastomer engineered for use in catheter balloons.

Applications This product was designed for use in standard rubber processing techniques such as two roll milling, extrusion, calendaring, compression and transfer molding. Cure with 1.0 parts (by weight per 100 parts base) TS-50 peroxide is typically achieved in 10 minutes at 115°C. Postcure is necessary to stabilize physical properties and to remove peroxide residues. Typical postcure for a 4 mm sample is 2 hours at 177°C, or 1 hour at 200°C.

- Advantages**
- Important characteristics include:
 - Cures with several types of peroxide catalysts between 110°C - 200°C
 - High clarity
 - High elongation

Typical Properties

<u>Property</u>	<u>Results</u>	
	HCRU 4125	HCRU 4135
• Durometer, Shore A units	25	35
• Tensile Strength, psi	1200	1300
• Elongation, %	950	900
• Specific Gravity	1.10	1.12
• Appearance	colorless, translucent	colorless, translucent

Please note: The typical properties listed in this bulletin are not intended for use in preparing specifications for any particular application of Silbione® silicone materials. Please contact our Technical Service Department for assistance in writing specifications.

Bio-compatibility This product is intended for short term implant or contact less than 30 days and has been tested to meet USP Class VI requirements. Additional testing is available by request. Manufacturing of this product is performed under stringent quality control and is fully traceable per ISO 9001 certified procedures.

The user of this material must independently determine that any medical product incorporating this material is safe and effective.

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Lot Testing

Each production lot is certified as having specified physical properties. Other testing is available upon request.

Storage and shelf life

Silbione® HCRU 4125 and Silbione® HCRU 4135 can be stored for up to 12 months from the date of manufacturing under cool and dry conditions below 30°C (86°F) to prevent container pressurization. Freezer storage is not necessary. Beyond this date, Elkem Silicones no longer guarantees that the product meets the sales specifications. Unused containers should be tightly closed to prevent evaporation. Suggested retest date is six months from date of shipment.

Safety





Elkem Silicones **Silbione® HCRU 4125 and Silbione® HCRU 4135** should be stored and shipped according to current regulations. Peroxide catalyst must be added before use. Contact with eyes may cause temporary discomfort. Material should be refreshed on a two-roll mill before use. Avoid overheating when refreshing.

Product safety information required for safe use is not included. Before handling, read the Safety Data Sheets for **Silbione® HCRU 4125 and Silbione® HCRU 4135** and container labels for safe use, physical and health hazard information.

Packaging

Silbione® HCRU 4125 and Silbione® HCRU 4135 is available in 20 kg box.

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