

Silbione® HCRA 4200 Series

October 2017

General Purpose High Consistency Rubber

Description **Silbione® HCRA 4200 Series (HCRs)** are two-component platinum-catalyzed silicone elastomers designed for fabricating tubing and medical device parts utilizing extrusion and compression molding processes. This material should be considered for applications requiring less than 30-day implantation in the human body.

- Advantages**
- Excellent extrusion process ability.
 - Rapid cure at elevated temperatures.
 - Good work life.
 - Post cure not required to achieve desired physical properties

Typical Properties

As supplied

<i>Typical properties</i>	ASTM	HCRA 4250	HCRA 4265
Appearance	TP 038	Hazy	Hazy
Mix Ratio	-	1:1	1:1
Specific Gravity	TP 013	1.14	1.16

Press Cure, 15 minutes 177°C (350°F) Cold Mold

<i>Typical properties</i>	ASTM	HCRA 4250	HCRA 4265
Hardness, Shore A	D2240	50	65
Tensile strength, Psi	D412	1200	1275
Elongation, %	D412	400	600
Tear strength, Ppi	D624 Die B	120	170
Work Life, hr	D412	>4	>4

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.

Processing

The **Silbione® HCRA 4200 Series** products are supplied as kit-matched products. Parts A and B components are designed to be mixed with standard milling processing equipment and techniques.

Cure:

Cure is initiated once the two-part A and part B components are mixed and can be accelerated by heating the mixed elastomer. Cure is dependent upon temperature and part size.

Special care must be taken to assure clean molds/dies and a clean work area with no organic rubbers used on the same processing equipment.

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Caution: Traces of foreign materials can poison the catalyst and inhibit the cure. All metering and mixing equipment should be thoroughly cleaned. Polymer systems, which contain traces of amines, sulfur, nitrogen oxide, organotin compounds and carbon monoxide can interfere with the cure of this product and should be avoided.

Note: Kit matching, accurate measuring and complete mixing are essential factors in obtaining consistent results.

Regulation

Bio-compatibility Testing

Designed specifically for healthcare applications, **Silbione® HCRA 4200 Series** meet or exceed testing requirements of United States Pharmacopoeia (USP) Class VI. Biocompatibility testing addresses the categories of evaluation for cytotoxicity, skin sensitization and skin irritation specified in ISO 10993. These products are not suitable for use in devices requiring human implantation for greater than 30 days.

Storage and shelf life

For shelf life, comply with the storage instructions printed clearly on the packaging.





Safety

Please consult the Safety Data Sheet for **Silbione® HCRA 4200 Series**

Packaging

Silbione® HCRA 4200 Series is available in multiple packages, please check with our team.

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