

## Silplus\* 70 CW

**Product Description** **Silplus 70 CW** is a heat-cure silicone rubber base compound especially designed to meet the requirements of the wire and cable industry.

### Key Performance Properties

- Excellent processing (High Green Strength)
- Good mechanical profile
- Good electrical properties
- Enhanced high temperature resistance
- **Silplus 70 CW**, when cured in accordance to conditions given below comply with the following approval:  
UL 94 HB, file E224733, Momentive performance materials

### Typical Product Data

<b>Typical Properties of the Uncured Base Compound:</b>			
Appearance			translucent
Density	DIN 53 479 A	g/cm <sup>3</sup>	1.19
Mooney viscosity	DIN 53 523		
ML (0) 25 ° C		ME	80
ML (4) 25 ° C		ME	70
<b>Typical Properties of the Vulcanized Rubber:</b>			
100 (pbw) Silopren HV 2/2170 with 1.5 (pbw) bis-(2,4-dichlorobenzoyl)-peroxide* (50 %) Vulcanization conditions: 10 min. @ 120 ° C			
Hardness	DIN 53 505	Shore A	70
Tensile strength	DIN 53 504 S2	N/mm <sup>2</sup>	12.0
Elongation at break	DIN 53 504 S2	%	450
Tear strength	ASTM D 624 die B	N/mm	18
Volume resistivity	DIN IEC 93	ohm.cm	1 x 10 <sup>15</sup>
Dielectric strength	IEC 243-1	kV/mm	25
Dielectric constant	IEC 250	(50 Hz)	3.1
Dissipation factor	IEC 250	(tan delta / 1000 Hz)	2.6 x 10 <sup>-4</sup>

### Attention:

Using peroxides other than bis-(2, 4-dichlorobenzoyl)-peroxide\* (50 %), **Might result in different mechanical properties might result in different mechanical properties.**

Diacyl-peroxids like Di(2,4-dichlorobenzoyl)peroxide are non vinyl specific cross link peroxides (higher cross link density)

Diaryl-peroxids like Dicumylperoxide or Dialky-peroxides like 2,5-Dimethyl-2,5-di(tert.butylperoxy)hexan are vinyl specific cross link peroxides (lower cross link density)

**Specifications** Typical Product Data should not be used as specifications. Assistance and specifications are available by contacting Momentive performance materials or the next Sales Office.

**Containers** **Silplus 70 CW** is available in 500 kg boxes

**Instructions for Use** Various organic peroxides will vulcanize the compounding bases. Fabricators should make their selection of curing agent on the basis of method of fabrication, desired properties, and safety considerations. They are mixed into the rubber on a two-roll-mill, if necessary together with **Silopren HV Additives**.

If the goods are to be vulcanized without pressure, e.g. in hot air or in an infrared radiation tunnel, bis-2, 4-dichlorobenzoyl-peroxide\* (50%) is recommended. The dosage ranges from 1-2 parts (pbw) of cross-linking agent on 100 parts (pbw) of base compound. Good results have been achieved with a dosage of 1.5 parts (pbw). While the cross-linking agent is being incorporated the temperature of the compound should not exceed 40°C to avoid scorch. So the rolls of the mixing mill should always be well cooled.

**Handling and Safety** **Silplus 70 CW** is not compliant to FDA / BfR regulations. Material Safety Data Sheets are available upon request from Momentive performance materials. Similar information for other chemicals used with Momentive performance materials products may be obtained from your suppliers.

\*Caution:  
Bis-2,4-dichlorobenzoyl peroxide may generate polychlorinated biphenyls (PCBs) during the curing process. EC Directive 76/769 and its amendments limits the content of PCBs to max. 50 mg/kg product.

**Storage Period** The shelf life for the **Silplus 70 CW** is 12 months from date of manufacture, if stored in the original unopened boxes and stored at dry conditions at room temperature (max. 27 deg. C, < 60 % rel. humidity). The shelf life will be indicated by the "use before date" on the associated Certificate of Analysis.

**Availability** **Silplus 70 CW** may be ordered from your regular sales contact or please call Momentive performance materials at 00800-4321-1000 to find out which is the nearest sales office to you.



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