

## HANSA SFA 42102 End capped vinyl siloxanes

### Description

All products of the HANSA SFA 42 series are end-capped vinyl siloxanes with different molecular weights and viscosities. The reactivity of the vinyl-functional polymers can be employed in addition as well as peroxide-activated curing systems.

Addition-curing chemistry based on platinum cure is the basis for formulating silicone elastomers. Our vinyl polymers can serve as basis of these formulations to achieve different levels of viscosity, hardness, and mechanical properties. Using the HANSA SFA 42 series, you can ensure that your elastomer products are highly reactive, transparent, and low in volatiles.

### Key Features

- Excellent reactivity
- Good stability to UV, chemicals and weathering
- High transparency
- No shrinkage during crosslinking

### Key Applications

- Intermediate for addition curing formulations

### Use and Cure Information

The preferred catalyst for the Hydrosilylation reaction is platinum catalyst from the ALPA-KAT series. It is advised to determine the ratio of hydride to vinyl functional siloxane and the desired reaction component beforehand. Especially when using filled system, a hydride excess is needed.

All materials of the HANSA SFA 4 series are stable at ambient temperature under the exclusion of water.

All components should be well mixed to ensure the material is uniform. For best results, we recommend degassing afterwards.

Great care must be taken when handling and mixing all addition cured silicone elastomer systems, ensuring that all the mixing tools are clean and constructed in materials which do not interfere with the curing mechanism. The cure of the rubber can be inhibited by the presence of compounds of nitrogen, sulphur, phosphorus and arsenic; organotin catalysts and PVC stabilizers; epoxy resin catalysts and even contact with materials containing certain of these substances e.g. moulding clays, sulphur vulcanised rubbers, condensation cure silicone rubbers, onion and garlic.

These substances may impair or even completely prevent the curing behavior of addition crosslinking silicones typically indicated by tacky surfaces. Therefore, it is important to check the compatibility in preliminary tests if unknown substrates are used.

### Health & Safety

Please observe our safety data sheets and the safety remarks on our container labels when handling our products. The dangerous goods regulations and the accident prevention regulations of the professional associations must be particularly observed. Keep the EC safety data sheet of the applied product at hand since it provides you with useful instructions for the safe use and disposal of the product as well as for actions to be taken in case of accidents.

CHT Polymers are available in a variety packaging including bulk containers. Please contact our customer service department for more information.

| Property                 | Test Method | Value               |
|--------------------------|-------------|---------------------|
| <b>Product</b>           |             |                     |
| Color                    |             | <b>Transparent</b>  |
| Molecular weight g/mol   |             | <b>24000 g/mol</b>  |
| Non-Volatile Content (%) |             | <b>&gt; 99</b>      |
| Shelf Life               |             | <b>12 mths</b>      |
| Ultralow cyclic content  |             | <b>Yes</b>          |
| Vinyl content mmol/g     |             | <b>0.12 mmol/g</b>  |
| Viscosity                | Brookfield  | <b>1000 cP</b>      |
| <b>Uncured Product</b>   |             |                     |
| Cure Type                |             | <b>Additon cure</b> |
| <b>Cured Product</b>     |             |                     |
| Density                  | BS ISO 2781 | <b>0.97 g/cm3</b>   |
| <b>Solubility</b>        |             |                     |
| Solubility - Water       |             | <b>insoluble</b>    |

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