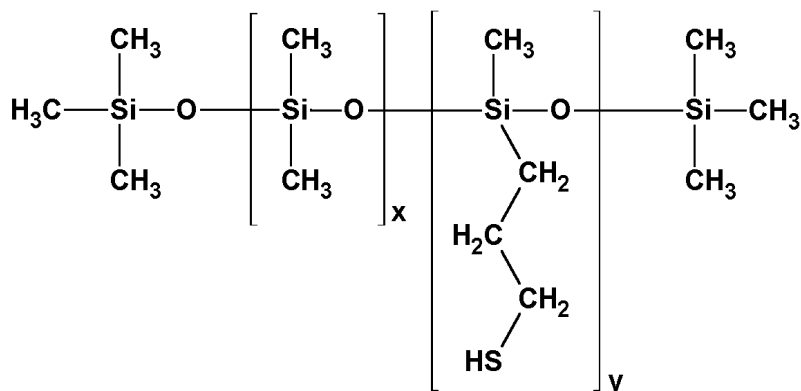




## Product Information

### GP-710 MERCAPTO FUNCTIONAL SILICONE FLUID

Genesee Polymers' *GP-710 MERCAPTO FUNCTIONAL SILICONE FLUID* is a high viscosity dimethyl silicone copolymer fluid, containing mercaptopropyl sidechains in addition to the conventional methyl group substituents. The structure of *GP-710* is as follows:



$x = 933$  (Approximately)  
 $y = 6$  (Approximately)

Molecular Weight = Approximately 70,000

**INNOVATIVE POLYMER TECHNOLOGY**

<b>TYPICAL PROPERTIES</b>	
<b>Appearance</b>	<b>Colorless, Light Straw Liquid</b>
<b>Specific Gravity</b>	<b>0.98</b>
<b>Flash Point</b>	<b>&gt;450° F</b>
<b>Weight/Gallon</b>	<b>8.0 lbs.</b>
<b>Molecular Weight</b>	<b>70,000 (Approximately)</b>
<b>% Active</b>	<b>100%</b>
<b>% Solvents</b>	<b>None</b>
<b>% SH</b>	<b>0.28%</b>
<b>Viscosity, 25° C</b>	<b>32,000 cSt</b>
<b>Solubility</b>	<b>Aliphatic and Aromatic Solvents, Chlorinated Solvents</b>

<b>APPLICATIONS</b>
<b>Plastic and Rubber Release Agent</b>
<b>Internal Lubricant and Release Agent for Sulfur and Peroxide Cure Rubber</b>
<b>Co-reactant in Vinyl Polymerizations</b>
<b>Corrosion Inhibitor Coatings</b>
<b>Synthesis of Organic - Silicone Copolymers</b>
<b>Ingredient in UV and EB Cure Inks and Coatings</b>
<b>Heat Stabilizer Additive for Use in Dimethyl Silicone Fluids</b>



## SPECIAL FEATURES

Reactive Mercapto Functionality

High Affinity for Metal Surfaces

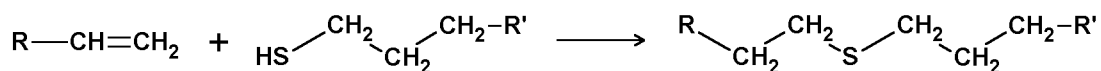
Corrosion Inhibiting Properties

Better Release Agent than Conventional Silicone Fluids in Many Applications

Greater High Temperature and Oxidative Stability than Conventional Silicones

### Reactions of Mercapto Silicone

The most useful reaction of the mercapto functionality of *GP-710* involves addition to double bond compounds:



This reaction has been applied to the addition of a wide variety of olefins, including styrene, 1-alkenes, acrylic and methacrylic acids, along with unsaturated compounds. Catalysts include basic materials and peroxides.

Mercapto groups also have shown reactivity with isocyanates, epoxies and sulfur cure or peroxide cure rubber elastomers.

## PROCESSING AND SAFETY GUIDELINES

*GP-710 MERCAPTO FUNCTIONAL SILICONE FLUID* may be easily mixed with aliphatic or aromatic hydrocarbon solvents. The fluid is also fully compatible with dimethyl silicone fluids.

*GP-710* should be handled with all of the precautions required in handling any industrial chemical product. Consult Safety Data Sheet for additional details.

## PACKAGING/HANDLING/STORAGE

*GP-710 MERCAPTO FUNCTIONAL SILICONE FLUID* is supplied in 5-gallon (40 lbs.) pails, 55-gallon (440 lbs.) drums and 330-gallon (2640 lbs.) totes. No special storage requirements are necessary.



[www.gpcsilicones.com](http://www.gpcsilicones.com)

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