

# **GP-1154 Vinyl Terminated Diphenyl-Dimethylsiloxane Copolymer**

Genesee Polymers' *GP-1154 Vinyl Terminated Diphenyl-Dimethylsiloxane Copolymer* is a vinyl-functional silicone with the following structure:

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This structure gives *GP-1154* a wide variety of applications, especially in release and paintable resins. Moreover, *GP-1154*'s high refractive index makes it an attractive candidate for use in optical applications, especially for index matching for improving optical clarity of cured resins or for fine-tuning the refractive index of cured resins. *GP-1154* finds use as a precursor intermediate in textiles, high refractive index encapsulants, protective coatings, mold releases, car polishes and optical medical devices. When used in mold release applications, the balance of dimethyl and diphenyl subunits impart a high degree of mold release while also maintaining compatibility with many paint formulations. The vinyl functionality of *GP-1154* provides a reactive site for cross-linking by ultraviolet or heat accelerated free radical cross-linking reactions.

*GP-1154 Vinyl Terminated Diphenyl-Dimethylsiloxane Copolymer* is compatible with dimethyl silicone fluids, aliphatic, and aromatic solvents.

Product Code: C-1555 Revised: 08/06/2024

# **TYPICAL PROPERTIES**

Appearance Clear to Slightly Hazy, Light Straw Liquid

Weight/Gallon 8.4 lbs.

Viscosity 10000 cP

Flash Point (P.M.C.C.) >150° C

Refractive Index 1.429

Specific Gravity 1.01

% Active 100%

% Diphenyl 4-6%

#### **APPLICATIONS**

**Coatings and Finishes** 

**Rubber and Plastic Mold Release** 

**Paint Formulation Compatibility** 

**Optical Applications** 

#### **SPECIAL FEATURES**

**High Refractive Index** 

**Rapid Curing** 

**High Clarity** 

**High Thermal Stability** 

**High Radiation Stability** 



#### PROCESSING AND SAFETY GUIDELINES

Genesee Polymers' *GP-1154 Vinyl Terminated Diphenyl-Dimethylsiloxane Copolymer* contains a low level of vinyl groups. Care should be exercised in handling GP-1154 to prevent contact with skin or eyes. Wear safety glasses with side shields and rubber gloves when handling. Consult Safety Data Sheet for additional details.

## PACKAGING/HANDLING/STORAGE

*GP-1154 Vinyl Terminated Diphenyl-Dimethylsiloxane Copolymer* is supplied in 5-gallon (19 kg) pails, 55-gallon (218 kg) drums and 330-gallon (1311 kg) totes.



## www.gpcsilicones.com

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