

GP-1164 Vinyl Terminated Diphenyl-Dimethylsiloxane Copolymer

Genesee Polymers' *GP-1164 Vinyl Terminated Diphenyl-Dimethylsiloxane Copolymer* is a vinyl-functional silicone with the following structure:

$$= - \stackrel{\downarrow}{s_i} - \stackrel{\downarrow}{\circ} -$$

This structure gives *GP-1164* a wide variety of applications, especially in release and paintable resins. Moreover, *GP-1164*'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-1164* 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-1164* provides a reactive site for cross-linking by ultraviolet or heat accelerated free radical cross-linking reactions.

GP-1164 Vinyl Terminated Diphenyl-Dimethylsiloxane Copolymer is compatible with dimethyl silicone fluids, aliphatic, and aromatic solvents.

Product Code: C-1582 Revised: 08/06/2024

TYPICAL PROPERTIES

Appearance Clear to Slightly Hazy, Light Straw Liquid

Weight/Gallon 8.8 lbs.

Viscosity 1250 cP

Flash Point (P.M.C.C.) >200° C

Refractive Index 1.50

Specific Gravity 1.05

% Active 100%

% Diphenyl 22-25%

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-1164 Vinyl Terminated Diphenyl-Dimethylsiloxane Copolymer* contains a low level of vinyl groups. Care should be exercised in handling GP-1164 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-1164 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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