

GP-4 SILICONE FLUID

Genesee Polymers' *GP-4 SILICONE FLUID* is an amine functional silicone polymer with the following structure where x = 58 and y = 4:

The amine-alkyl functionality of *GP-4 SILICONE FLUID* provides a versatile reaction site for the synthesis of a wide variety of silicone/organic copolymers, which may be tailored for use in textiles, coatings, car polishes and many other applications. The presence of polar amine groups also gives greater affinity to many substrates, suggesting use of *GP-4* in lubricant, coating and mold release formulations.

GP-4 SILICONE FLUID is compatible with dimethyl silicone fluids and with aliphatic, aromatic and chlorinated hydrocarbon solvents.

Product Code: C-2246 Version: 3.0 Revision Date: November 30, 2018

TYPICAL PROPERTIES	
Appearance	Clear, Colorless to Light Straw Liquid
Weight/Gallon	8.0 lbs.
Viscosity	125 cSt
Flash Point (P.M.C.C.)	>200° F
Refractive Index	1.4150
Specific Gravity	0.98
% Active	100%
Amine Number*	90

^{*}Number of mls. 0.1 N HCl needed to neutralize 10.0 gms. of GP-4

APPLICATIONS

Silicone - Organic Copolymer Synthesis

Rubber and Plastic Mold Release

Foundry Release Agents

Internal Mold Release

Detergent Resistant Car Polishes

SPECIAL FEATURES

High Amine-Alkyl Content

Stable Indefinitely in Closed Containers

Good Heat Stability



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PROCESSING AND SAFETY GUIDELINES

Genesee Polymers' *GP-4 SILICONE FLUID* is an alkaline material because of its amine content. Care should be exercised in handling 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-4 SILICONE FLUID is supplied in 5-gallon (40 lbs.) pails, 55-gallon (440 lbs.) drums and 330-gallon (2640 lbs) totes.

Moisture Sensitive. Keep container tightly sealed. Store below 100° F. Do not weld or cut drum, even when empty.

SUGGESTED FORMULATION

Emulsions of GP-4 in water:

Combine with mixing in order:

50 Parts Isopropyl Alcohol

1.2 Parts Acetic Acid

50 Parts GP-4

10 Parts Soft Water

(Weight of above per mole Amine = 5475 gms.)

The resulting clear solution can then be added to water with simple mixing to prepare nearly clear micro-emulsions of desired concentrations.

Reducing the amount of Isopropyl Alcohol yields a larger particle size emulsions and increased opacity.



www.gpcsilicones.com

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