



Product Information

GP-596 EPOXY FUNCTIONAL SILICONE SOLUTION

Genesee Polymers' *GP-596* is a 28% active epoxy functional silicone polymer in solution. The epoxy functionality in *GP-596* allows for rapid cross-linking with standard amine curing agents. Selecting the proper curing agent is dependent on application techniques, pot life requirements, cure conditions and physical properties needed.

Cured coatings formed from *GP-596* exhibit greater elongation, higher impact resistance and more flexibility, than coatings formed from standard bisphenol A type resins. This increased flexibility allows for greater adhesion to coated surfaces, resulting in improved durability.

In addition to the tough coating properties of *GP-596*, the presence of the unique silicone-epoxy copolymer imparts non-stick and rust inhibiting characteristics as well. This strongly suggests applications involving protection of ferrous and nonferrous metals exposed to extreme abrasion conditions, or corrosive atmospheres.

GP-596 may be formulated with pigments, thickeners, dispersants and other additives as needed to yield finished coatings. The technology of formulating is closely related to standard epoxy resin coatings applications.

SUGGESTED CURING SYSTEM:

Combine: 100 parts *GP-596* Epoxy Functional Silicone Solution
 3.5 parts Ancamine 1617 Curing Agent
 (Air Products & Chemical, Inc.; Allentown, PA)

This mixture may be applied by spraying, dipping or brushing. Applied films will cure completely in 2 - 7 days at room temperature, or four hours at 105° C. Use proper precautions needed for handling coatings containing flammable solvents.

Catalyzed solutions of *GP-596* and curing agent have a limited pot life.

INNOVATIVE POLYMER TECHNOLOGY

TYPICAL PROPERTIES	
Appearance	Clear to Slightly Hazy Liquid
Weight/Gallon	7.8 lbs.
Viscosity	30 cSt
Flash Point (P.M.C.C.)	64° F
Specific Gravity	0.93
% Active	28%
Equivalent Weight per Epoxy (EEW) (Solution)	1,720 gms.
Solvents	Xylenes

APPLICATIONS
Flexible Coatings
Release Coatings
Plastic Additives (impact modifier)
Rust Inhibiting Coating
Adhesives (imparts flexibility)
Marine & Industrial Maintenance Coatings
Barnacle Release Coatings
Coil Coatings
Concrete Mold Release
Automotive Rust Proofing
Fiberglass Sizing Agent



APPLICATIONS

Filler Treatment
Conductive Coatings
Electronics
Copper and Brass Protective Coating
Plastic Internal Release Agent

SPECIAL FEATURES

Forms Highly Adhesive Flexible Coatings
Extremely Durable
Rust Inhibition
Clear, Cured Film
Abrasion Resistant
Excellent Bonding
Release Properties
Excellent Weathering
Chemical Resistant
Curable at Ambient or Elevated Temperatures



PROCESSING AND SAFETY GUIDELINES

The handling of *GP-596 EPOXY FUNCTIONAL SILICONE SOLUTION* involves the use of Flammable solvents (toluene, isopropyl alcohol), which present certain hazards in use. Consult Safety Data Sheet for additional details.

PACKAGING/HANDLING/STORAGE

GP-596 EPOXY FUNCTIONAL SILICONE SOLUTION is supplied in 5-gallon (40 lbs.) pails and 55-gallon (430 lbs.) drums. Observe safe conditions common to storing Flammable Materials. Do not store near fire or flame.

Moisture Sensitive. Keep containers tightly sealed. Do not weld or cut drums, even when empty.



www.gpcsilicones.com

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