



AC-39

Description

AC-39 is a liquid polyanhydride (a liquid flexibilizer/curing agent), which imparts a high degree of flexibility to an epoxy resin, thereby providing excellent thermal shock properties to the cured product. It is effective when used by itself, as well as in blends. The advantages of using AC-39 include low-medium mix viscosity without diluents, excellent thermal shock and vibration absorption with superior electrical resistive properties.

Typical Applications

- Coatings / Electrical Varnishes
- Electrical potting compounds

Specifications

Appearance	Light Yellow Liquid
% Anhydride	13.3 - 16.7
% Free Acid	2.8 - 4.2
Viscosity, 25°C, cps	1500 – 2200
Specific Gravity, 25°C	1.002 - 1.006
Boiling Point	>340°C
Equivalent Weight	500
Molecular Weight	350

Typical Formulation

Parts by Weight

Epoxy Resin (EEW 175-210)	100
AC-39	200
Benzyl Dimethyl Amine (BDMA)	1

Cure schedule: 1 hr at 80°C followed by 3 hrs at 150°C.

Properties

(at cure schedule 70°C, 1-1.5 hours)

Hardness, Shore D	55
Tensile Strength, psi	1,650
Elongation, %	92

AC-39 passes 10 cycles, 155.C to minus 55.C, in the Navy "Hex Bar" test, MIL-I-16923C, as incorporated in the above formulation.

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