



AC-32

Description

AC-32 is a solid di-anhydride with 2 trimellitic anhydride groups attached to an aromatic cyclic backbone. AC-32 provides higher aromatic content to epoxy cured systems resulting in superior heat resistance, higher Tg and lower moisture permeability. AC-32 also imparts toughness which improves vibration dampening as well as enhanced thermal shock resistance. AC-32 blends easily with our other liquid anhydrides (i.e. MTHPA, MHHPA, METH-E). The resulting mixtures remain liquid at room temperature. AC-32 is mainly used as a curing agent for epoxy resins for filament winding, powder coating and pultrusion. Coatings made w/AC-32 excel in wet strength retention and abrasion resistance.

Chemical Formula: $C_{23}H_{14}O_{12}$

Molecular Weight: 482

Typical Applications

- Powder coatings
- Electrical castings
- Filament winding and pultrusion
- Ambient temperature stable epoxy pre-pregs
- Transfer molding compounds

Specifications

Appearance	Amber Resinous Solid
% Anhydride	24.0 min.
% Free Acid	6.0 max.
Melting Range	60-80°C

Typical Formulation

Parts by Weight	
Epoxy Resin (EEW 185)	100
AC-32	57
MTHPA-NT	38
Imidazole	1.0

Properties

(at cure schedule 135°C/ 1 hour)

Heat Deflection Temperature, °C	150
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It is emphasized that the combination of AC-32 and MTHPA produces a liquid system at room temperature, which, when cured at low temperatures (135°C), results in HDT's of 150°C.



Packaging and Storage

AC-32 is available in 50 lb metal pails or in 500 lbs metal drums. It must be stored away from open flames or other potential ignition sources at ambient temperature. Containers should remain tightly sealed to avoid moisture absorption.

Shelf Life: 12 months from production date.

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