

**EPOTUF<sup>®</sup> 37-606**  
Product Code: 37606-00  
**Modified, Aliphatic,  
Polyamine Curing Agent****DESCRIPTION**

EPOTUF<sup>®</sup> 37-606 is a modified, aliphatic, polyamine curing agent for room-temperature curing of EPOTUF<sup>®</sup> epoxy resins.

**APPLICATIONS**

- Hand lay-up laminating and tooling
- High-solids, high-build coatings and clear high-gloss coatings
- Electrical potting, encapsulating, and casting
- Decorative industrial and chemical-resistant flooring
- Modifier for polyamide hardeners
- Adhesives

**FEATURES**

- Low viscosity
- Low color
- Cures in thin sections with high gloss
- Long pot life
- Non-blushing

**PROPERTIES**

Viscosity at 25°C	300
Color, Gardner	5 max
Pounds per Gallon, Solution	8.2
Specific Gravity, 25/25°C	1.00
Mix Ratio, phr, 190 EEW Liquid Epoxy	45
Amine Hydrogen Equivalent Weight, Theoretical	85
Pot Life with EPOTUF <sup>®</sup> 37-140, Minutes at 25°C, 100g Mass	45

**STORAGE**

Store in a cool, dry place, preferably under 80°F to ensure a useful shelf life of at least one year.

***Read the EPOTUF<sup>®</sup> 37-606 Material Safety Data Sheet before handling, storing, or using this product.***

The information herein is general information designed to assist customers in determining whether our products are suitable for their applications. Our products are intended for sale to industrial and commercial customers. We require customers to inspect and test our products before use and to satisfy themselves as to contents and suitability for their specific applications. We warrant that our products will meet our written specifications. **Nothing herein shall constitute any other warranty express or implied, including any warranty of merchantability or fitness for a particular purpose**, nor is any protection from any law or patent to be inferred. All patent rights are reserved. The exclusive remedy for all proven claims is limited to replacement of our materials and in no event shall we be liable for special, incidental or consequential damages.

**SUGGESTED FORMULATION**

**White Enamel**  
EB-37606A

**Component A**

<u>Lbs.</u>	<u>Gals.</u>	<u>Material</u>	
354.4	37.70	EPOTUF® 37-100	
17.7	2.62	Diisobutyl Ketone	
1.8	0.22	BYK 341	(1)
255.0	7.66	TiPure R-900	(2)

High-speed disperse to Hegman 4:

76.9	10.60	Xylene
<u>53.2</u>	<u>7.87</u>	Diisobutyl Ketone
759.0	66.67	TOTAL

**Component B**

159.5	19.22	EPOTUF® 37-606
70.9	10.50	n-Butyl Alcohol
<u>26.2</u>	<u>3.61</u>	Xylene
256.6	33.33	TOTAL
1015.6	100.00	TOTAL COMPONENTS A+B

**Analysis:**

11.84	Pigment Volume Concentration, Percent
0.495	Pigment/Binder Ratio
1033	Spread at 1 Mil., Ft <sup>2</sup> per Gallon
75.56	Percent Solids, Weight
64.39	Percent Solids, Volume
10.14	Pounds per Gallon
237	VOC, Grams per Liter
1.98	VOC, Pounds per Gallon

**Suppliers:**

(1) BYK-Chemie, U.S.A.                      (2) DuPont

**TYPICAL PERFORMANCE DATA**

**Typical Properties of Unfilled Castings  
Cures With EPOTUF<sup>®</sup> Epoxy Hardener 37-606**

EPOTUF<sup>®</sup> 37-140 100 Parts by Weight  
EPOTUF<sup>®</sup> 37-606 45 Parts by Weight

**Reactivity**

Gel Time at 25°C/77°F, 100g in 4 oz. Paper Cup, Minutes 40 – 50\*  
Peak Exotherm, °C/°F 177 – 188 / 350 – 370  
Time to Peak, Minutes 46 – 56

\*Gel time data should be taken only as a guide since exact data is highly dependent upon sample mass, container, temperature of the resin and hardener, and room temperature. Small differences in any of these factors will make a difference in the gel time of the resin/hardener mix. It is advisable, therefore, to determine gel time of the mix under actual working conditions.

**Mechanical Properties**

	Cure Schedule	
	1 <sup>(1)</sup>	2 <sup>(2)</sup>
Hardness, Barcol 934-1	24-28	25-29
Heat Distortion Temperature, °C/°F	46 – 53 / 115 – 127	65 – 72 / 149 – 162
Tensile Strength, psi	8 – 9,000	10 – 11,000
Tensile Elongation, psi	2 – 3	6 – 7
Flexural Strength, psi	12 – 14,000	15 – 17,000
Flexural Modulus, psi × 10 <sup>-5</sup>	4.9-5.2	4.3 – 4.6
Compressive Strength, at Yield, psi	—	12 – 13,000
Compressive Strength, at Break, psi	15 – 16,000	24 – 26,000
Compressive Modulus, at Break, psi × 10 <sup>-5</sup>	3.9 – 4.2	3.3 – 3.6
Impact Strength, Izod Notched, Foot-Pounds per Inch Notch	0.3 – 0.4	0.9 – 1.2
Water Absorption, Percent Weight		
24 Hours at 25°C/77°F	0.1 – 0.2	0.1 – 0.2
2 Hours at 100°C/212°F	1.2 – 1.3	1.0 – 1.1

<sup>(1)</sup>Cure Schedule 1: 7 Days at 25°C/77°F.

<sup>(2)</sup>Cure Schedule 2: Overnight at 25°C/77°F + 2 Hours at 120°C/250°F.

**Blends of EPOTUF<sup>®</sup> Epoxy Hardener 37-606 With Polyamides**

Polyamides, an important class of epoxy hardeners, have the disadvantage of high viscosity. This limits their use in many applications such as hand lay-up laminating and highly filled compounds EPOTUF<sup>®</sup> 37-606 may be used as an effective modifier for polyamides to achieve lower viscosity without significantly affecting properties. This is illustrated by the following data:

Formulations	1	2	3	4
EPOTUF <sup>®</sup> 37-146	100	100	100	100
EPOTUF <sup>®</sup> 37-606	45	22.5	11.2	0
EPOTUF <sup>®</sup> 37-640	0	22.5	33.7	45
Gel Time at 250°C/77°F, 100g,	64*	112*	119*	137*

Shyodo Gel Timer, Model 100, Minutes

\*Gel time data should be taken only as a guide since exact data is highly dependent upon sample mass, container, temperature of the resin and hardener, and the room temperature. Small differences in any of these factors will make a difference in the gel time of the resin/hardener mix. It is advisable, therefore, to determine gel time of the mix under actual working conditions.