



## adhesivetech

17 Corban Avenue, Henderson, Waitakere 0612  
P.O. Box 21169, Henderson, Waitakere 0650, Auckland, New Zealand  
Phone: +64 9 838 6961 Website: adhesivetech.co.nz

VERSION: 1.0

DATE ISSUED: 09/02/2024

## TP33 / HP33 Epoxy Hardener

### Introduction:

HP33 is a solvent free medium viscosity hardener specifically designed for the use with TP33 epoxy resin. This cured system provides excellent electrical encapsulation and moisture resistant barriers for electrical components and windings.

For small casting applications e.g. Pattern making. The resin/hardener mix may be extended with mineral fillers i.e. Calcite, silica flour to reduce cost and lower the peak exotherm.

Furthermore the resin/hardener mix may be thickened with WEST SYTEM 403 Microfibre blend to produce an excellent general purpose epoxy adhesive.

### Typical Applications:

- ❖ Electrical casting
- ❖ Potting applications
- ❖ Electrical windings
- ❖ Laminating
- ❖ Coating
- ❖ Adhesives

### Mix Ratio:

25 parts HP33 to 100parts TP33 (by volume)

Note: Care should be taken to when dispensing and mixing.  
Optimum results are achieved when recommended ratios are used.

	TP33	HP33
<b>Physical State</b>	Colourless liquid	Amber Liquid
<b>Specific Gravity (g/ml)</b>	1.14 – 1.16	0.98 -1.00
<b>Viscosity @ 20°C</b>	1000 – 1200cps	160-200cps

**Note:** Our products are intended for sale to industrial and commercial customers. We request that customers inspect and test our products before use and satisfy themselves as to contents and suitability. Nothing herein shall constitute a warranty, express or implied, including any warranty or merchantability or fitness, nor is protection from law or patent to be inferred. All patent rights are reserved. The exclusive remedy for all proven claims is replacement of our materials and in no event shall we be liable for special or consequential damages.



## adhesivetech

17 Corban Avenue, Henderson, Waitakere 0612  
P.O. Box 21169, Henderson, Waitakere 0650, Auckland, New Zealand  
Phone: +64 9 838 6961 Website: adhesivetech.co.nz

VERSION: 1.0

DATE ISSUED: 09/02/2024

## TP33 / HP33 Epoxy Hardener

### Cured Characteristics:

HP33	
Pot Life 100g @ 20°C	18-20mins
Thin Film 3mm @ 20°C	90-110mins
Mixed Viscosity @ 20°C	800cps
HDT (7 days @ 20°C)	54°C

Note: Typical properties and not to be construed as actual specifications, pph = parts per hundred parts of resin

### Casting Properties:

#### TP33 / HP33

(Cured 24hrs @ 20°C)

TEST	RESULT	METHOD
Compressive Yield	10,000 psi	ASTM D-695
Tensile Strength	11-12,000 psi	ASTM D-638
Elongation at break	4%	ASTM D-638
Tensile Modulus	4.9 x 10 <sup>5</sup> psi	ASTM D-638
Flexural Strength	16,000 psi	ASTM D-790
Flexural Modulus	400,000 psi	ASTM D-790
Shore Hardness	79	

### Post Cure:

Post cures at elevated temperatures will be effective in achieving a fast cure, but longer cure times at a gradually increasing temperature are recommended for achieving ultimate HDT.

### Storage:

TP33 and HP33 will keep for 2 years if kept in original containers at room temperature (15°C – 32°C) and out of direct sunlight. Containers should be tightly sealed to prevent moisture absorption.

**Note:** Our products are intended for sale to industrial and commercial customers. We request that customers inspect and test our products before use and satisfy themselves as to contents and suitability. Nothing herein shall constitute a warranty, express or implied, including any warranty or merchantability or fitness, nor is protection from law or patent to be inferred. All patent rights are reserved. The exclusive remedy for all proven claims is replacement of our materials and in no event shall we be liable for special or consequential damages.



## adhesivetech

17 Corban Avenue, Henderson, Waitakere 0612  
P.O. Box 21169, Henderson, Waitakere 0650, Auckland, New Zealand  
Phone: +64 9 838 6961 Website: adhesivetech.co.nz

VERSION: 1.0

DATE ISSUED: 09/02/2024

## TP33 / HP33 Epoxy Hardener

### Health & Safety

Adhesive Technologies NZ Ltd provides its customers with a product specific Material Safety Data Sheet (MSDS) to cover potential health effects, safe handling, storage, use and disposal information. Direct skin contact should be avoided, all amines they have a moderate sensitizing potential and should be considered to be mild skin corrosives. TP33 system should not be ingested; in an unlikely event TP33 is ingested see your nearest physician immediately.

- ❖ Use with good ventilation and adequate safety equipment including gloves.
- ❖ If skin contact occurs, wash with lanolin based hand-cleaner and water.
- ❖ If eye contact occurs, immediately wash for 15 minutes with running water.
- ❖ If swallowed:

**Resins** - DO NOT induce vomiting, and contact a doctor or the Poisons Information Centre.

**Hardeners** – DO NOT induce vomiting, give plenty of milk or water and contact a doctor or Poisons Information Centre.

**Note:** Our products are intended for sale to industrial and commercial customers. We request that customers inspect and test our products before use and satisfy themselves as to contents and suitability. Nothing herein shall constitute a warranty, express or implied, including any warranty or merchantability or fitness, nor is protection from law or patent to be inferred. All patent rights are reserved. The exclusive remedy for all proven claims is replacement of our materials and in no event shall we be liable for special or consequential damages.