ADHESIVE TECHNOLOGIES NZ LTD.
17 Corban Avenue, Henderson, Auckland ■ P.O. Box 21169, Henderson, Auckland 8, New Zealand
Phone: +64 9 838-6961 ■ Facsimile: +64 9 836-4849 ■ Website: www.adhesivetechnologies.co.nz

Technical Data Sheet
WEST SYSTEM 105
Version 1.2 August 2013

WEST SYSTEM 105 Epoxy Resin

Introduction

WEST SYSTEM 105 is a low viscosity, solvent free epoxy resin specifically formulated for the use with the WEST SYSTEM range of hardeners to cure at room temperature or low temperature applications in fibre composite boat construction.

It is designed specifically to wet out and bond with wood, fibreglass, reinforcing fabrics and a variety of metals.

As an adhesive, WEST SYSTEM 105 will bridge gaps and fill voids when modified with WEST SYSTEM fillers and can be easily sanded and shaped when cured.

As a coating, WEST SYSTEM 105 has excellent thin-film characteristics to flow out and self-level without "fish eyeing."

The resin cures clear so that you can achieve a natural finish when coating with varnish. It has a relatively high flash point and no strong solvent odor, making it safer to work with than polyesters.

Typical Applications

- Boat construction
- Potting
- Encapsulation
- Sporting equipment
- Automotive

Mix Ratio

See Hardener label.

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

Uncured Properties

WEST SYSTEM 105	
Physical state	Colourless liquid
Specific Gravity (g/ml)	1.14
Viscosity @ 20°C	1000cps

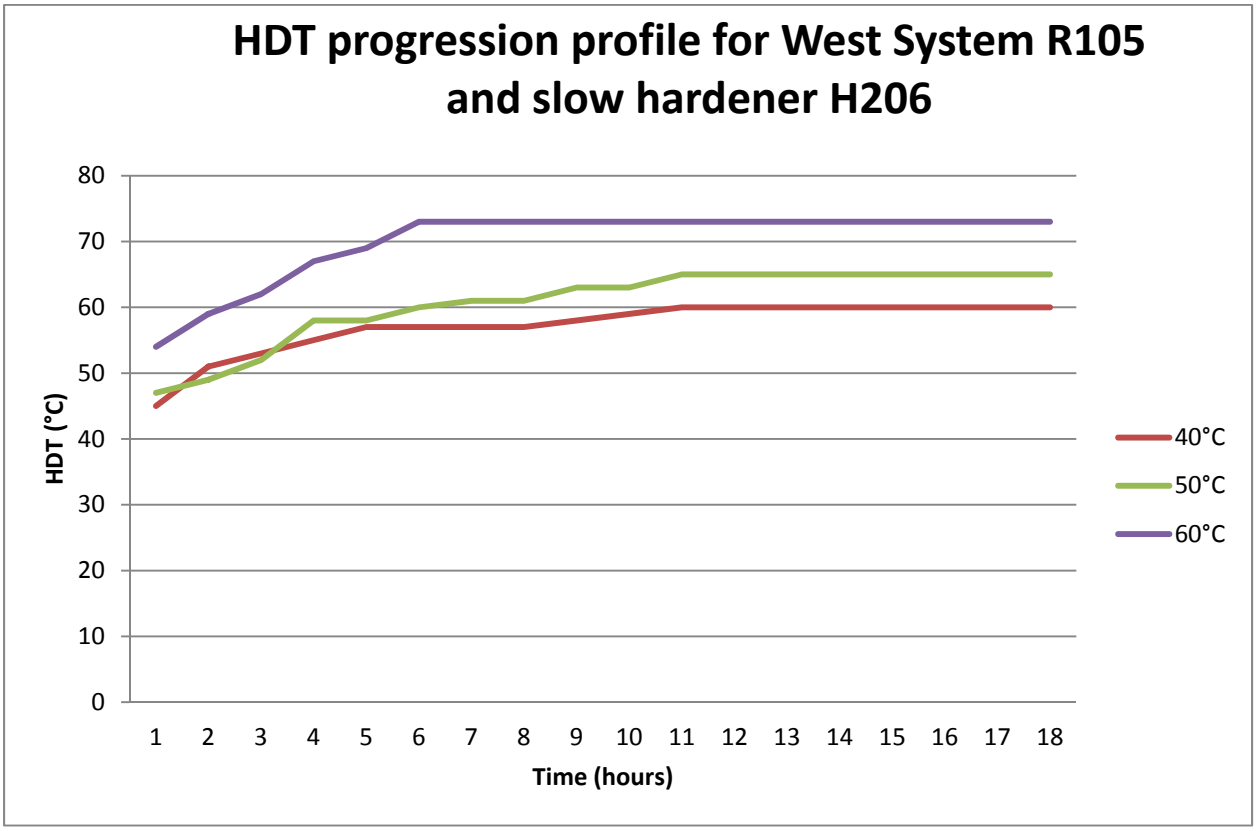
Cured Characteristics

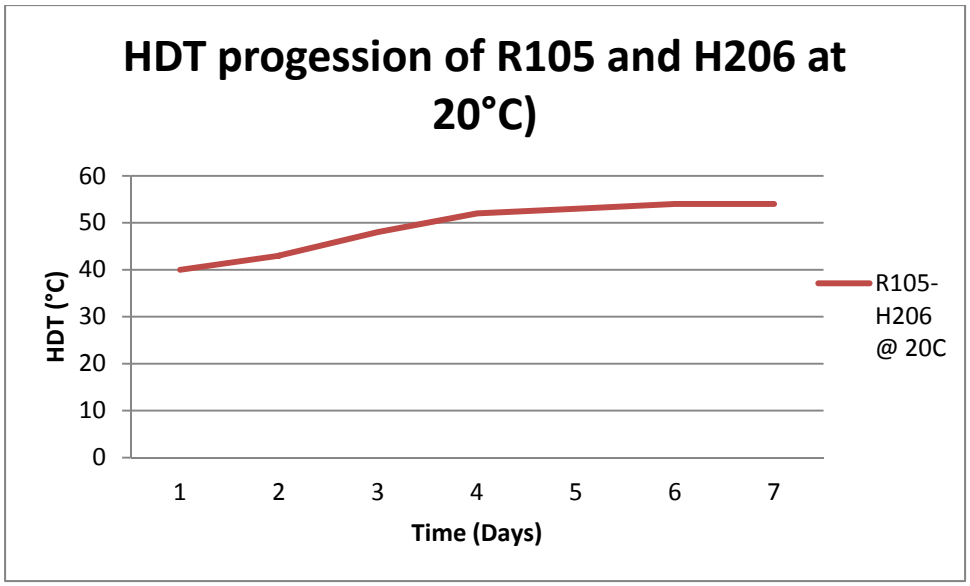
	205	206	207	209
Mix Ratio *(by weight)*	20	20	33	33
Mix Ratio *(by volume)*	5 : 1	5 : 1	3 : 1	3 : 1
Pot Life 100g @ 20°C	15min	22min	27min	60min
Thin Film @ 20°C	60 - 70min	90 - 110min	110 - 130min	3 - 4hrs
Mixed Viscosity @ 20°C	975	725	775	650
HDT after 7days @ 20°C	52°C	54°C	58°C	56°C
Ultimate HDT	68°C	76°C	70°C	69°C
Typical post cure requirement	24hrs @ 20°C followed by 6hrs @ 60°C			

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

Cure Development Profiles

The following graphs may be used to predict Cure progression during baking cycles for H206 hardener





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

WEST SYSTEM 105 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.

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 sensitising potential and should be considered to be mild skin corrosives. WEST SYSTEM 105 system should not be ingested; in an unlikely event WEST SYSTEM 105 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.