

## Adhesives and Tooling

### Tooling Systems

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## Araldite® Kit K3600

The resin of Araldite® Kit K3600 is a specially formulated low viscosity di-functional resin.

The hardener of Araldite® Kit K3600 is a formulated polyamide adduct.

The two products combine to give a laminating system of exceptionally low viscosity and superior wetability.

Laminates manufactured using this system exhibit excellent stability to ambient temperature changes. This enables the fabricator to take better advantage of the superior properties offered by today's glass, carbon and aramid fabrics. Even better performance properties can be achieved by post curing parts at elevated temperatures.

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Mix Ratio	Product	PBW	PBV
	Araldite LC 3600	100	100
	Hardener LC 3600	30	33
	Initial Mix Viscosity at 25°C (mPa.s)	300 - 400	

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Typical Properties	Resin Component	
	Viscosity at 25°C (mPa.s)	: 500 - 700
	Specific Gravity	: 1.12 - 1.16
	Flash Point	: Above 100°C
	<b>Hardener Component</b>	
	Viscosity at 25°C (mPa.s)	: 100 - 150
	Specific Gravity	: 0.95 - 0.99
	Flash Point	: Above 100°C

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Usable Life	(100g at 25°C) minutes	: 90 ± 10
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**Cured Properties**

Cure Schedule

7 days @ 25°C    24 hours @ 25°C    24 hours @ 25°C  
@ 25°C+ 15 hours @ 50°C    +4 hours @ 80°C

Glass transition (°C)	TM22	50	75	90
Tensile Strength (N/mm <sup>2</sup> )	TM48	30	65	70
% Elongation	TM48	3	3.5	3.5
Flexural Strength (N/mm <sup>2</sup> )	TM46	67	84	102
Flexural Modulus (N/mm <sup>2</sup> )	TM46	2200	4300	4800

Values quoted are averages.

The tests were performed on unfilled resin and hardener mixed and cured at the indicated schedules.

Curing Conditions	Tg (°C)
7 days @ 15°C, ambient relative humidity	44
7 days @ 15°C, 90% relative humidity	44
7 days @ 15°C + 14 hours @ 50°C	50
7 days @ 30°C, ambient relative humidity	62
7 days @ 30°C, 90% relative humidity	60
7 days @ 30°C + 14 hours @ 50°C	71
7 days @ 25°C, ambient relative humidity	57

Tensile bond strength 7 days @ 25°C                      15 N/mm<sup>2</sup>

**Shelf Life**

The Resin of Araldite® Kit K3600 has a shelf life of 48 months and the Hardener of K3600 has a shelf life of at least 24 months provided that they are stored at 18-25°C in a dry place and in the sealed original containers.

**Clean Up**

Any spillages should be cleaned up as they occur. Use dry sand or sawdust to soak up bulk of large spillages, and deposit into waste drums. Clean up small spillages before they set with Eposolve 70 (**Vantico**) or warm water and detergent.

**CAUTION:** *Eposolve 70 contains Toluene and should only be used in well ventilated areas. Avoid direct skin contact. For further information, refer to the specific instruction sheet*

## Handling Precautions

## Caution

Vantico Pty Limited products are generally quite harmless to handle provided that certain precautions normally taken when handling chemicals are observed. The uncured materials must not, for instance, be allowed to come into contact with foodstuffs or food utensils, and measures should also be taken to prevent the uncured materials from coming into contact with skin, since people with particularly sensitive skin may be affected. The wearing of impervious rubber or plastic gloves will normally be necessary; likewise the use of eye protection. The skin should be thoroughly cleansed at the end of each working period by washing with soap and warm water. The use of solvents is to be avoided. Disposable paper - not cloth towels - should be used to dry the skin. Adequate ventilation of the working area is recommended. These precautions are described in greater detail in Vantico Pty Limited Publication No. 24264/3/e Hygienic precautions for handling plastic products of Vantico Pty Limited and in the Vantico Pty Limited Material Safety Data sheets for the individual products. These publications are available on request and should be referred to for fuller information.

## First Aid

- If the material enters eyes, flood with water for at least 15 minutes, then consult a doctor.
- If skin rashes or allergic responses (such as wheezing, swelling) occur, consult a doctor.
- If swallowed, **DO NOT** induce vomiting. Drink copious amounts of water and contact a doctor or the Poisons Information Centre.

If more specific information on toxicity and safe handling is required, the following publications are available from Vantico on request.

Material Safety Data Sheet

"Epoxy Resins - Instructions for Use, Handling and Disposal"

Printed in Australia

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## HUNTSMAN

Advanced Materials

Vantico Pty Limited

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