

Araldite[®] Kit K 106

Araldite [®] KIT K 106	Part A	100	pbw	100	pbv
Araldite [®] KIT K 106	Part B	80	pbw	100	pbv

Araldite[®] K106 is a two-part, formulated epoxy based general purpose adhesive.

Application

It is suitable for bonding a wide variety of metals, ceramics, glass, rubber, rigid plastics and most other materials in common use.

Processing methods

Manual mixing

Key Properties

Easy to mix and apply
 Cures at temperature down to 15°C
 Solvent free
 Provides a semi-rigid joint
 Good resistance to dynamic loading
 Cures from room temperatures to 100°C
 High shear and peel strength
 Tough and resilient

Product Data (Guideline Values)

Araldite® Kit K 106

		Resin	Hardener
Colour	TM02	Translucent Liquid	Amber Liquid
Viscosity mPa.s@ 25°C	TM03	20000 - 35000	20000 - 33000
Specific Gravity	TM16	1.15 – 1.25	0.9 – 1.0
Flash Point °C	TM23	210	110
Shelf Life		At least one year	At least one year

Processing Data (Guideline Values)

Mix Ratio

	Parts By Weight	Parts By Volume
Araldite Kit K106 Part A	100	100
Araldite Kit K106 Part B	80	100

Gel Time, Viscosity and Curing

Mix Viscosity At 25°C	Tm03	mPa.s	30000-45000
Gel Time At 25°C		min	90 -120
Pot Life		min	65-90
Minimum Curing Cycle At 25°C	18 hours		

Processing and Storage (Guideline Values)

Preparation

It is essential that the correct mixing ratio be used and that the resin and hardener are thoroughly mixed together before use. Inaccuracies will result in a lowering of the physical properties of the cured system, and if the error is sufficiently great, the system may not cure satisfactorily.

Mixing

Blend both components together well to achieve a homogenous mix. Mixing of the components can be done at room temperature.

Surface Pretreatment

To obtain complete satisfactory and durable joints, the surfaces to be bonded must be properly pretreated. All traces of dirt, oil and grease must be removed using a solvent, such as Eposolve 70 (Huntsman Advanced Materials) or acetone etc. Alcohol, petrol or paint thinners should never be used (see note below) Maximum bond strength is obtained by mechanically abrading or chemically etching the surface to provide a better key for the adhesive. Mechanical abrading must be followed by a second, thoroughly degreasing treatment.

For more specific information, please refer to **Araldite® Adhesives Surface Preparation and Pretreatments**.

Curing

To determine whether crosslinking has been carried to completion and the final properties are optimal, it is necessary to carry out relevant measurements on the actual object or to measure the glass transition temperature. Different gel and cure cycles in the customer's manufacturing process could lead to a different degree of crosslinking and thus a different glass transition temperature.

Storage Conditions

Store the components in a dry place at RT, in tightly sealed original containers. Under these conditions, the shelf life will correspond to the expiry date stated on the label. After this date, the product may be processed only after reanalysis. Partly emptied containers should be tightly closed immediately after use.

For information on waste disposal and hazardous products of decomposition in the event of a fire, refer to the Material Safety Data Sheets (MSDS) for these particular products.

Mechanical and Physical Properties (Guideline Values)

Determined on standard test specimen at 23°C. Cured for 24h/RT + 6h/80°C

Glue line colour				Translucent Amber
Roller peel strength	ISO 4578	N/mm		5
Max. service temperature °C				65
Tensile strength (Wood/Wood)	ISO 527	MPa		Wood fails
Tensile strength (Al/Al)	ISO 527	MPa		>17
Thermal conductivity	VDE 0304	W/mK		0.28
Water absorption	ISO 62-80	%	24h @ 23°C	0.8

Industrial hygiene

Mandatory and recommended industrial hygiene procedures should be followed whenever our products are being handled and processed. For additional information please consult the corresponding Safety Data Sheets and the brochure "Hygienic precautions for handling plastics products".

Handling Precautions

Safety precautions at workplace:

protective clothing

Yes.

gloves

Essential.

arm protectors

Recommended when skin contact likely.

goggles/safety glasses

Yes.

respirator/dust mask

Recommended.

Skin protection:

before starting work

Apply barrier cream to exposed skin.

after washing

Apply barrier or nourishing cream.

Cleaning of contaminated skin

Dab off with absorbent paper, wash with warm water and alkali-free soap, then dry with disposable towels. Do not use solvents.

Clean shop requirements

Cover workbenches, etc. with light coloured paper. Use disposable beakers, etc.

Disposal of spillage

Soak up with sawdust or cotton waste and

Ventilation:

deposit in plastic-lined bin.

of workshop

of workplace

Renew air 3 to 5 times an hour.

Exhaust fans. Operatives should avoid inhaling vapors.

First Aid

Contamination of the **eyes** by resin, hardener or casting mix should be treated immediately by flushing with clean, running water for 10 to 15 minutes. A doctor should then be consulted.

Material smeared or splashed on the **skin** should be dabbed off, and the contaminated area then washed and treated with a cleansing cream (see above). A doctor should be consulted in the event of severe irritation or burns. Contaminated clothing should be changed immediately.

For more detailed information please read Huntsman Advanced Material safety data sheets for the individual products.

Note

Araldite[®] is a registered trademark of Huntsman Corporation or an affiliate thereof in one or more countries, but not all countries.

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HUNTSMAN ADVANCED MATERIALS

Huntsman Advanced Materials(Australia) Pty Limited
ABN 93 091 627 879

Gate 3 Ballarat Road, Deer Park, VIC
Tel: + 61 3 9361 6060
Fax: +61 3 9361 6066
<http://www.huntsman.com>