

Araldite[®] Kit K 330-1

Araldite [®] Kit K 330-1	Part A	100	pbv	100	pbw
Araldite [®] Kit K 330-1	Part B	100	pbv	100	pbw

Araldite[®] K 330-1 is a two-part, formulated epoxy based adhesive.

Application

This non-sag system cures to provide good adhesion to a variety of substrates such as natural stone and ceramics.

Processing methods

Manual mixing

Key Properties

Simple 1:1 ratio
 Creamy texture blends easily
 Long pot life
 Water washable
 Compressive strength superior to concrete

Product Data (Guideline Values)

		Resin	Hardener
Colour		Light Beige	Black
Consistency		Thixotropic Paste	Thixotropic Paste
Specific Gravity gm/cm ³		1.45 - 1.5	1.45 - 1.5
Flash Point°C	ASTM D93	172	above 100
Shelf Life		At least two years	At least two years

Processing Data (Guideline Values)

Mix Ratio

		Parts by weight	Parts by volume
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Gel Time, Viscosity and Curing

Usable Life	at 25°C		40-50 min	depending on quantity mixed
Minimum Cure Time	at 25°C	ISO 291	24 hours	
Full Cure	at 25°C		7 days	
Coverage		400-800 gm/m ²		
Minimum Application Temperature	15°C			

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.

Surface Pretreatment

To obtain completely 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. 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, thorough degreasing treatment. For more specific information please refer to "Araldite® Adhesives Surface Preparation and Pretreatments"

Mixing

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

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.

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 (Huntsman Advanced Materials) 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

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				Grey
Compressive Strength		N/mm ²	ISO 604	55 - 65
Elastic Modulus In Compression		N/mm ²	ASTM D695	1200 - 1400
Tensile Bond Strength (Al/Al)	at 25°C	N/mm ²	ISO 4587	15 - 17
Flexural Strength		N/mm ²	ISO 178	30 - 40
Tensile Strength		N/mm ²	ISO 527	20 - 25
Maximum Operating Temperature			DSC 7	55°C
Water Absorption	at 25°C	10 days	ISO 62	0.5 - 0.8% by weight
1N/Mm ² = 1 Mpa = 145 Psi				
Shore D Hardness				80 - 85

*Typical Figures Only, Will Vary
With Time And Temperature.

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
gloves
arm protectors
goggles/safety glasses
respirator/dust mask

Yes.
Essential.
Recommended when skin contact likely.
Yes.
Recommended.

Skin protection:
before starting work
after washing

Apply barrier cream to exposed skin.
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:
of workshop
of workplace

deposit in plastic-lined bin.

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

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