

Araldite[®] Kit K 219

Araldite [®] Kit K 219	Part A	100	pbv	100	pbw
Araldite [®] Kit K 219	Part B	100	pbv	100	pbw

Araldite[®] kit K 219 is a two-part, free flowing liquid epoxy based adhesive.

Application

It cures very rapidly to provide good adhesion.

Processing methods

Manual mixing

Key Properties

Easy to mix and apply
Cures at temperatures down to 10°C
Cures rapidly to form flexible bonds
Transparent glue line
Cures with negligible shrinkage.

Product Data (Guideline Values)

Araldite® kit K 219

		Resin	Hardener
Colour	TM02	Yellow Clear Liquid	Yellow Clear Liquid
Viscosity mPa.s at 25°C	TM03	12000-16000	11000-15000`
Specific Gravity gm/cm ³	TM16	1.13 - 1.17	1.1 - 1.2
Flash Point° C	TM23	above 200	above 100
Shelf Life		at least two years	at least two years

Processing Data (Guideline Values)

Mix Ratio

	Parts by weight	Parts by volume
Araldite Kit K 219 Part A	100	100
Araldite Kit K 219 Part B	100	100

Gel Time, Viscosity and Curing

Usable Life @ 25°C		2-5 min	
Initial Mix Viscosity	@ 25°C	TM03	8000-12000 mPa.s
Minimum Cure Time	@ 15°C	TM09	60 minutes
	@ 25°C	TM09	30 minutes
Full Cure	@ 25°C	TM09	3 - 4 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.

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.

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	TM02	Transparent Yellow
Tensile Bond Strength (AL/AL) at 25°C	TM48	12 - 15 N/mm ²
Tensile Bond Strength (Wood/Wood)	TM48	Wood fails
Maximum Operating Temperature		45°C
Water absorption (cold, 10 days)	TM35	2.1 - 2.5% by weight

(1N/mm² = 1 MPa = 145 psi)

*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

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

Huntsman Corporation

®Registered trademark



All recommendations for use of our products, whether given by us in writing, verbally, or to be implied from results of tests carried out by us are based on the current state of our knowledge. Notwithstanding any such recommendations the Buyer shall remain responsible for satisfying himself that the products as supplied by us are suitable for his intended process or purpose. Since we cannot control the application, use or processing of the products, we cannot accept responsibility therefore. The Buyer shall ensure that the intended use of the products will not infringe any third party's intellectual property rights. We warrant that our products are free from defects in accordance with and subject to our general conditions of supply.

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>