
Aerospace Adhesives
Araldite[®] 252 A/B
Low density, epoxy syntactic

Key properties

- Room temperature cure
- Gap filling
- Easily sandable
- Less than 1% volatiles emitted during cure
- High temperature stability after room temperature cure

Description

Araldite 252 A/B is a two component, room temperature curing, low density filler paste. It can be used as a potting compound and as an edge filler in honeycomb sandwich structures.

**Typical product
data**

Property	Araldite 252 A	Araldite 252 B	Mixed syntactic
Colour (visual)	blue	off white	blue paste
Specific gravity	ca. 0.65	ca. 0.65	ca. 0.65
Consistency at 25°C	non flow paste	non flow paste	non flow paste
Gel time (100 gm at 25°C)mins	-	-	60

Processing**Pretreatment**

The strength and durability of a bonded joint are dependant on proper treatment of the surfaces to be bonded.

At the very least, joint surfaces should be cleaned with a good degreasing agent such as acetone, trichloroethylene or proprietary degreasing agent in order to remove all traces of oil, grease and dirt. Alcohol, gasoline (petrol) or paint thinners should never be used.

The strongest and most durable joints are obtained by either mechanically abrading or chemically etching ("pickling") the degreased surfaces. Abrading should be followed by a second degreasing treatment.

Mix ratio	Parts by weight	Parts by volume
Araldite 252 A	100	100
Araldite 252 B	40	40

The resin and hardener should be blended until they form a homogeneous mix.

Pot life

Due to the exothermic reaction between the two components the pot life is, to some extent, dependent on the quantity mixed and the shape of the container. Use a shallow container to extend pot life:

As an approximate guide

for 50g mix, pot life at 25°C is 2 hours

for 100g mix, pot life at 25°C is 1½ hours

Application

Eliminate voids by working the mixed resin into place using a trowel or spatula.

Recommended cure cycle

After 16 hours at 22°C the material will have hardened sufficiently to become handelable.

Maximum compression strength is obtained after 3 days at 22°C.

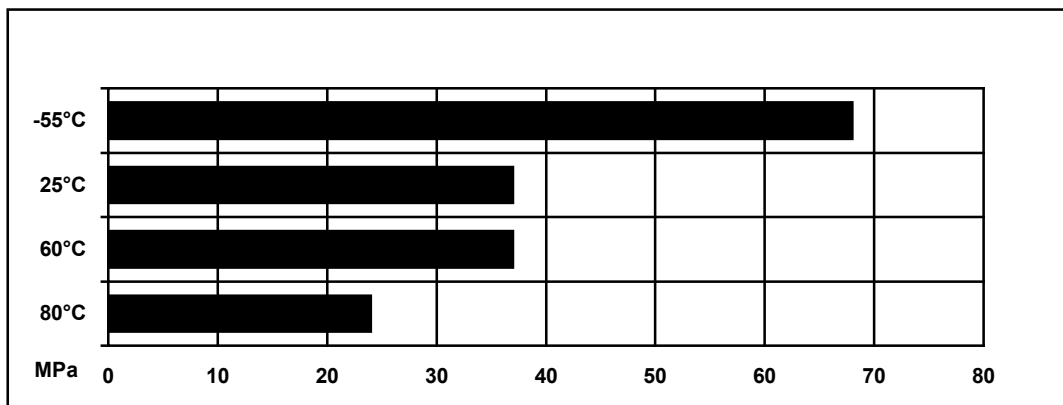
Cure may be accelerated by heating. A cure of 2 hours at 70°C is sufficient to fully harden Araldite 252 A/B.

Typical cured properties

The figures were determined with typical production batches using standard testing methods. They are provided solely as technical information and do not constitute a product specification.

Test	Units	Results	Test method
Compressive strength at 22°C	MPa	35	-
Compressive modulus at 22°C	GPa	1.4	-
Flammability	-	Self extinguishing	BMS 5.28
Weight change immersion 24 hours at 25°C in water	%	+1.3	-

Variation of compressive strength with temperature



Storage

Araldite 252 A/B may be stored for up to 2 years at 25°C, provided that the components are stored in their original sealed containers. The expiry date is indicated on the label.

Handling precautions**Caution**

Huntsman Advanced Materials 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 be taken to prevent the uncured materials from coming in contact with the 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 publication No. 24264/3/e Hygienic Precautions For Handling Plastics Products and in the Huntsman Advanced Materials Material Safety Data sheets for the individual products. These publications are available on request and should be referred to for fuller information.

Adhesives and Tooling

All recommendations for the use of our products, whether given by us in writing, verbally, or to be implied from the 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 therefor. 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.

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