

**Advanced Materials****Araldite® 203 A/B****Aerospace Adhesives****DATA SHEET****KEY PROPERTIES**

- **Two Component Epoxy Paste Adhesive**
- **Good Lap Shear Strength up to 150°C**
- **Ideal for Insert Bonding**

**DESCRIPTION**

Araldite® 203 A/B is a two component room temperature curing paste adhesive of high strength and toughness with good temperature resistance. Its primary use is the bonding of load bearing inserts into honeycomb sandwich panels.

**PRODUCT DATA**

Property	Araldite® 203 A	Araldite® 203 B	Mixed Adhesive
Colour (visual)	blue	red	blue
Specific gravity (A77)* (mg/m <sup>3</sup> )	1.2 – 1.3	(0.9 – 0.92)*	1.2 – 1.3
Viscosity at 25°C (Pas)	paste	0.01 – 0.002	ca 120
Gel time at 25°C (A9)* (min)			100 - 300

*\* Specified data are on a regular basis analysed. Data which is described in this document as 'typical' is not analysed on a regular basis and is given for information purposes only. Data values are not guaranteed or warranted unless if specifically mentioned.*

**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 or other proprietary degreasing agents 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
Araldite® 203 A	100
Araldite® 203 B	14

**Application**

The resin and hardener must be blended until they form a homogeneous mix. The mix can be applied manually or extruded.

The pot life depends on the quantity mixed and the shape of the container (use a shallow container to extend pot life).

**Equipment maintenance**

All tools should be cleaned before adhesives residues have had time to cure. The removal of cured residues is a difficult and time-consuming operation.

If solvents such as acetone are used for cleaning, operatives should take the appropriate precautions and, in addition, avoid skin and eye contact.

**Recommended cure cycle**

7 – 10 days at 23°C or 16 hours at 23°C + 10 min at 150°C

Handling strength: 16 hours at 23°C

Cure Time at 23°C (days)	1	2	4	8	16	Full cure
Lap Shear Strength (MPa)	5	6	7	8	9	19*

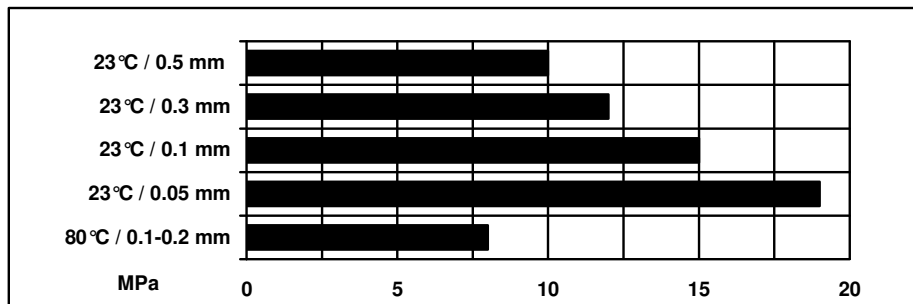
\* 10 min at 150°C postcure

**TYPICAL CURED PROPERTIES**

(Not for specification purposes)

**Lap Shear Strength versus bond line thickness** (typical average values)

Cure cycle: 16 hours at 23°C + 10 min at 150°C



**STORAGE**

Araldite® 203 A/B must be stored for up to 2 years at 2 - 8°C and the components must be stored in their original sealed containers. The expiry date is indicated on the label.

**HANDLING  
PRECAUTIONS****Caution**

Our 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 the Material Safety Data sheets for the individual products and should be referred to for fuller information.

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