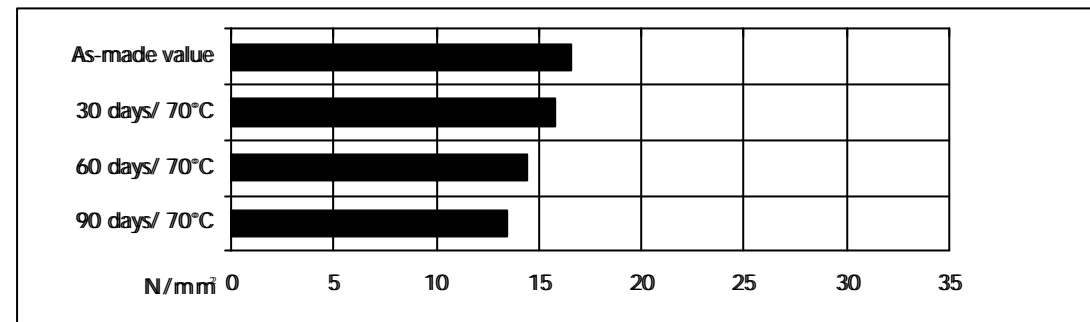


**Performance
polymers**

Structural Adhesives

Lap shear strength versus heat ageing

Cure: 16 hours/40°C

**Thermal cycling**100 cycles of 6 hour duration from -30°C to 70°C 4.5N/mm²**Colour stability test**

3mm thick samples placed in a Daylight Test Cabinet for 2 weeks showed only very slight yellowing when checked both visually and using a Minolta Chroma Meter Cr200. The test is equivalent to Ca 10 years outdoor exposure.

Storage

Araldite 2020/A and Araldite 2020/B may be stored for up to 3 years at room temperature provided the components are stored in sealed containers. The expiry date is indicated on the label.

**Handling
precautions****Caution**

Ciba Specialty Chemicals' 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 Ciba Specialty Chemicals publication No. 24264/3/e Hygienic precautions for handling plastics products of Ciba Specialty Chemicals and in the Ciba Specialty Chemicals Material Safety Data sheets for the individual products. These publications are available on request and should be referred to for fuller information.

Ciba Specialty Chemicals
Performance
Polymers

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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Araldite® 2020 (XW 396/XW 397)**Two component clear epoxy adhesive system****Key properties**

- Low viscosity, water white adhesive
- Especially suitable for glass and ceramic bonding
- Suitable for clear castings and laminates
- Refractive glass similar to that of glass

Description

Araldite 2020 is a two component, room temperature curing, low viscosity adhesive specifically designed for glass bonding.

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

Product data

	2020/A	2020/B	2020 (mixed)
Colour (visual)	Water white	Water white	Water white
Specific gravity	ca 1.12	ca 0.95	ca 1.1
Viscosity (Pas)	ca 150	ca 150	ca 150
Pot life (100 gm at 25°C)	-	-	40 - 50 minutes
Shelf life (2 - 40°C)	3 years	3 years	-
Refractive index	-	-	1.553
Flash point (°C)	140	>120	-

Processing**Pretreatment**

The strength and durability of a bonded joint are dependant on proper pretreatment 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 2020/A	100	100
Araldite 2020/B	30	35

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

Application of adhesive

The resin/hardener mix is applied with a spatula to the pretreated and dry joint surfaces.

A layer of adhesive 0.05 to 0.10 mm thick will normally impart the greatest lap shear strength to a joint.

The joint components should be assembled and clamped as soon as the adhesive has been applied. An even contact pressure throughout the joint area will ensure optimum cure.

