

Technical Data Sheet

ARO-BOND® 949

1K POLYURETHANE ADHESIVE

ARO-BOND® 949 IS A SINGLE COMPONENT MOISTURE CURING POLYURETHANE ADHESIVE.

IT HAS BEEN DEVELOPED SPECIFICALLY FOR APPLICATIONS IN THE PANEL MANUFACTURING AND LAMINATING INDUSTRIES.

Aro-Bond® 949 can be used for many applications where gap filling properties, high strength and a high level of water resistance is required. Aro-Bond® 949 has been successfully used for bonding many types of woods, plastic foams and other insulating materials to a wide variety of both rigid and flexible facing materials, including wood, metals and plastics. Aro-Bond® 949 has also been successfully used for bonding Accoya.

BENEFITS

- Extremely versatile and durable: bonds a wide range of materials.
- Suitable for a wide range of markets: used for the manufacture of various panels, including doors, cold stores and SIP's.
- Complete peace of mind: due to its high-strength waterproof bond and excellent temperature resistance.
- Minimises task time: single-component adhesive with a low coat weight and excellent coverage.

TECHNICAL DATA

Viscosity:	3500-6500 spc (20°C)
Solids:	93-97%
Heat resistance:	Approx 120°C
Coverage:	8-12m²/kg

AVAILABLE SIZES

Jerrican:	5.6kg
Jerrican:	22kg

AVAILABLE COLOURS

Brown

CURING TABLE

Temperature (°C):	15	17.5	20	22.5	25
Open time (minutes):	55	47	40	32	25
Cure time (minutes):	125	105	90	75	60

PREPARATION AND APPLICATION

Ensure that the surfaces to be bonded are clean and free from dust, grease and other contaminants.

Metals should be stored in a warm environment, prior to bonding, to avoid chilling of the glue-line (which can lead to extended cure times).

The adhesive should be applied evenly over one side of each glue-line using a mechanical roller coater, hand-roller or notched trowel. The amount applied will vary according to the porosity of the substrates, but will normally be in the range of 100-125gsm.

After application of the adhesive, a fine mist of atomised water must be applied to the adhesive. The amount required being approximately 10% of the weight of adhesive. The surfaces to be bonded should then interface as quickly as possible to minimise water evaporation, and placed under pressure within the open-time of the adhesive. The pressure required will depend on the nature of the substrates being bonded - but is usually in the range of 0.5 to 0.9bar.

Pressure should be maintained, until the adhesive is sufficiently cured to permit handling of the bonded item. Full cure of the adhesive is not obtained for 24 hours and handling within this period should be kept to a minimum.

HANDLING AND STORAGE

Aro-Bond® 949 when uncured can be removed with cleaning solvent such as Aro-Bond® Solvent 6. Cured product will prove very difficult to remove, however, soaking in Aro-Bond® 6 Solvent overnight will soften the adhesive. Nozzles from automatic bead applicators should be immersed in a non-reactive plasticiser when not in use.

Aro-Bond® 949 is a moisture sensitive adhesive

and left in contact with the open atmosphere will eventually gel. For this reason Aro-Bond® 949 is protected with a blanket of Nitrogen in the drum prior to despatch, which forms a dry, inert layer on top of the adhesive. Aro-Bond® 949 should be stored in the original containers in a cool, dry place, at a temperature range of between 5°C and 25°C. In these conditions it has a storage life of at least 3 months.

Once the container has been opened for use and the inert blanket replaced by moist air, the adhesive will have a limited life. To eliminate the moist air reacting with the adhesive a Nitrogen cylinder can be connected to the small bung hole of the drum, via suitable pressure reducing valves to give a positive pressure of 1 -2 psi.

Alternatively a desiccator can be connected to the small bung hole of the drum, which will dry the incoming air, replacing the adhesive used. A suitable desiccator with the relevant pipework can be supplied by Ureka. This will last for approximately 3 months prior to regeneration. Further information is available upon request.

If water enters the drum of adhesive, it will react giving off carbon dioxide which can cause over pressurisation of closed cans and drums.

The product should be stored un-opened in a dry condition at a temperature of 5-25°C. This will ensure the stated shelf-life. The adhesive will have a limited life once the container is opened.

DISCLAIMER: Due to the variation in materials likely to be handled by prospective users of this product, together with differences in production techniques and ultimate performance required, it is important that this product is thoroughly evaluated under production and end use conditions before being commercially adopted. Such an evaluation should incorporate an ageing test and this test should be repeated if the substrates on which the this product is used are changed in any way or are purchased from a different source. During the evaluation and testing of the product, it is the purchasers/end user's responsibility to carry out appropriate actions for the protection of the environment, the health and safety of its employees and purchasers of its products. No employee of Ureka Global Ltd has any authority to waive or change the foregoing provisions. The above recommendations are made in good faith for the guidance of users and are without liability. Any queries should be made in writing to the head office of Ureka Global Ltd.

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