



Technical Data Sheet

Bondloc B2012 5 Minute Epoxy Resin

PRODUCT DESCRIPTION

B2012 is a flexible easy-to-use solvent free epoxy adhesive. Can be used to bond or repair almost any material; such as wood, metal, glass, ceramic, plastic and rubber. B2012 is a fast setting resin which hardens in 5 minutes with high bond strength, chemical resistance and is clear in appearance.

APPLICATIONS

B2012 is suitable for bonding a wide range of variety of surfaces including steel, aluminium, and galvanised iron. B2012 reacts within a few minutes to give a tough resilient bond on a wide variety of surfaces.

USEFUL HINTS/NOTES

- Clean & easy to use
- Viscous but not thixotropic
- Rapid curing

INSTRUCTIONS FOR USE

- Ensure that surfaces to be bonded are clean and free from grease, dirt, dust and any other contamination.
- Mix equal quantities either by weight or volume of the two parts and stir thoroughly until a colour is obtained. Where a static mixing nozzle is supplied the 2 parts will be mixed correctly upon dispensing.
- Apply to one surface and offer up the second surface. Clamp or jig together under light pressure.

Leave to cure at room temperature.

STORAGE

Stored under dry conditions in closed containers between 5 and 25°C B2012 will have a shelf life of 12 months.

TECHNICAL FEATURES

| | Part 1 | Part 2 |
|----------------------|----------------------|-------------------------|
| Physical Form | Viscous liquid | Viscous liquid |
| Chemical Type | Epoxy | Mercaptan and polyamide |
| Appearance | Clear | Clear |
| Mixed Viscosity 25°C | 15,000 – 20,000 Pa.S | |
| Specific Gravity | 1.1 | |
| Mix Ratio | 1:1 vol/vol or wt/wt | |
| Work Life | As a mix: 5 mins | |
| Percent Solid | 100 | |
| Adhesive Set-up Time | 2-3 hours. | |

MECHANICAL PROPERTIES

| | |
|--|----------------------------------|
| Shore Hardness D | 78-80 (ASTM D 2240) |
| Shear Strength (N/mm ²) | 14-18 (DIN 53283) |
| Peel Strength (N/mm ²) | 3-5 (ISO 4578) |
| Thermal Conductivity (W/mK) | 0.1 |
| Coefficient of thermal expansion (1/k) | 60-120 x 10 E ⁻⁶ |
| Dielectric Strength (kv/mm) | 50-90 |
| Volume Resistivity (OHM/cm) | 3-5 x 10 E ¹² |
| Service Temperature | -40°C to +121°C (-40°F to 250°F) |

CURED PERFORMANCE

| Lap Shear Strength | |
|----------------------|---|
| Substrate | Shear Strength/Failure Mode |
| CRS/CRS | 2,350 psi – Cohesive Failure |
| Aluminium/Aluminium | 1,950 psi – Cohesive Failure |
| Copper/Copper | 1,850 psi – Cohesive Failure |
| FRP/FRP | 900 psi – Cohesive Failure |
| ABS/ABS | 850 psi – Cohesive Failure |
| Chemical Resistance | |
| Media | Lap Shear (ASTM D 1002) Strength in PSI |
| Gasoline | 2550 |
| Acetic acid (10%) | 2180 |
| Xylene | 2165 |
| Lubricating oil-HD30 | 2400 |
| Paraffin | 2275 |
| Water @ 23°C | 2355 |
| Water @ 90°C | 2325 |

HEALTH & SAFETY

This technical information sheet does not constitute a Safety Data Sheet (SDS). Before using this product ensure you have read and fully understood this products SDS

PACKAGING FORMAT

Cartridge.....28ml, 50ml, 200ml, 400ml
Clam.....28ml

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PRECAUTIONS: This product and the auxiliary materials normally combined with it are capable of producing adverse health effects ranging from minor skin irritation to serious systemic effects. None of these materials should be used, stored, or transported until the handling precautions and recommendations as stated in the Safety Data Sheets (SDS) for this and all other products being used are understood by all persons who will work with the product. Warranty: All products purchased from or supplied by Bondloc are subject to terms and conditions set out in the contract. Bondloc warrants only that its product will meet those specifications designated as such herein or in other publications. All other information supplied by Bondloc is consider accurate but are furnished upon the express condition the customer shall make its own assessment to determine the product's suitability for a particular purpose. Bondloc makes no other warranty, either express or implied, including those regarding such other information, the data upon which the same is based, or the results to be obtained from the use thereof; that any product shall be merchantable or fit for any particular purpose; or that the use of such other information or product will not infringe any patent.

