

## P1010 – Technical Data Sheet



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### Description

**P1010** is a high quality, neutral, elastic, one-component construction joint and adhesive sealant based on MR-Polymer.

It can be used for all usual building substrates, treated wood, PVC, plastics and where good resistance to water, aliphatic solvents, mineral oils, grease, diluted inorganic acids and alkalis is required.

However, it has a poor resistance to aromatic solvents, concentrated acids and chlorinated hydrocarbons.

### Typical Uses

**P1010** applications include:

- Bonding applications in construction and metal constructions;
- Elastic bonding in vibrating constructions;
- Sanitary applications;
- Sealing of floor joints;
- Connection joints in sheet metal fabrication;
- Sealing of air conditioning systems;
- Bonding of security and safety glass
- Supple bonding in car bodies, caravans and containers.

### Benefits

**P1010** offers the user the following benefits:

- Excellent adhesion on nearly all surfaces, even if slightly moist;
- Very good mechanical characteristics;
- High elasticity - movement accommodation up to  $\pm 20\%$ ;
- Impervious to mould, contains ZnP (biocide with fungicidal action);
- Good extrudability even at low temperatures;
- Non-staining including hydrophobic effect;
- Very low emission, EC1 PLUS R certified;
- No bubble formation within sealant in high temperature and humidity applications;
- Good weather and UV resistance;
- Free of isocyanates, solvents, halogens and acids;
- Can be painted with water based systems.

## Physical Properties

<b>Base</b>	MS Polymer
<b>Curing system</b>	Moisture curing
<b>Temperature resistance**</b>	-40°C to 90°C
<b>Skin formation*</b>	Ca. 10min
<b>Hardness**</b>	40+5 Shore A
<b>Maximum allowed</b>	+20%
<b>Elasticity modulus 100%</b>	0,75 N/mm <sup>2</sup>
<b>Consistency</b>	Stable paste
<b>Density**</b>	1,67 g/ml
<b>Application temperature</b>	5°C to 35°C
<b>Curing speed*</b>	2mm/24h to 3mm/24h
<b>Elastic recovery (ISO)</b>	>75%
<b>Max. tension (ISO37)**</b>	1,80 N/mm <sup>2</sup>
<b>Elongation at break</b>	750%

(\*) these values may vary depending on environmental factors such as temperature, moisture, and type of substrates.

## Joint Dimensions

<b>Minimum width for bonding</b>	2 mm
<b>Max width for bonding</b>	10 mm
<b>Minimum width for joints</b>	5 mm
<b>Max width for joints</b>	30 mm
<b>Minimum depth for joints</b>	5 mm

Recommendation sealing jobs: joint width = 2 x joint depth

## Directions for Use

Application method: With manual- or pneumatic caulking gun.

Cleaning: Clean with White Spirit immediately after use (before curing).

Finishing: With a soapy solution before skinning.

Repair: With the same material

## Notes

Porous surfaces in water loaded applications should be primed. Prepare non-porous surfaces with cleaner. The surfaces should be degreased before bonding them together.

**P1010** has excellent adhesion on most substrates and has been tested on the following metal surfaces: steel, AlMgSi1, brass, electrolytic galvanised steel, AlCuMg1, flame galvanised steel, AlMg3 and steel ST1403.

**P1010** also has a good adhesion on plastics: polystyrene, polycarbonate (Makrolon®), PVC, ABS, polyamide, PMMA, fiberglass reinforced epoxy, polyester. While producing plastics very often releasing agents, processing aids and other protective agents (like protection foil) are used. These should be removed prior to bonding or sealing. For optimum adhesion the use of Surface Activator is recommended.

Bonding plastics like PMMA (e.g. Plexi® glass), polycarbonate (e.g. Makrolon® or Lexan®) in stress loaded applications can give rise to stress cracking and crazing in these substrates. The use of P1010 is not recommended in these applications.

Not suitable for PE, PP, PTFE (eg Teflon®), bituminous substrates, copper or copper- containing materials such as bronze and brass. We recommend a preliminary adhesion and compatibility test on every surface.

**P1010** may be painted over with water-based paints, however due to the large number of paints and varnishes available we strongly suggest a compatibility test before application.

The drying time of alkyd resin based paints may increase.

**P1010** can be applied to a wide variety of substrates. Due to the fact that specific substrates such as plastics, like polycarbonate, etc, may differ from manufacturer to manufacturer, we recommend preliminary compatibility test.

**P1010** cannot be used as a glazing sealant.

**P1010** can be used for bonding of and sealing on natural stone.

When applying, make sure not to spill any sealant on the surface of materials. Taping the surface around the joint can prevent this.

The sanitary formula should not replace regular cleaning of the joint. Excessive contamination, deposits or soap remaining will stimulate the development of fungi.

When using different reactive joint sealants, the first joint sealant must be completely hardened before the next one is applied.

Not suitable for bonding aquariums.

Do not use in applications where continuous water immersion is possible.

Discoloration due to chemicals, high temperatures, UV-radiation may occur. A change in colour does not affect the technical properties of the product.

Contact with bitumen, tar or other plasticizer releasing materials such as EPDM, neoprene, butyl, etc. is to be avoided since it can give rise to discolouration and loss of adhesion.

### **Please consult the P1010 Health & Safety Data Sheet for statutory regulation information.**

Information relating to the products of Bondrite Adhesive Limited is based on tests carried out under laboratory conditions. If any of our products are not used in accordance with our instructions or are used under conditions which vary from our laboratory, they may not perform in accordance with any information provided and Bondrite shall not have any liability in this case. Bondrite will accordingly provide samples of our products, on request and free of charge, for Customers to carry out their own tests as to suitability of our product for their purposes and as used in their intended environment.

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