

Collacryl® K 190
Viscous solution adhesive

Type

Viscous, clear solution adhesive with polymerization curing on exposure to light.
Contains polymethylmethacrylate polymers in methyl methacrylate.

Applications

For making transparent edge and area bonds of clear uncrosslinked Plexiglas™ (PMMA); but also for other plastics such as PS, PC, PVC, CAB; conduct prior tests if necessary.

Working

Clean the adherends with DCL 80 detergent before applying the adhesive.
When bonding sawn edges, bubble formation can be reduced by smoothing the edges with abrasive paper (grit 400–600) and wiping them with a cloth soaked in K 90 thinner.
In areas with high stress level anneal the parts beforehand to relieve stress (2 – 4 hours at 70 to 80 °C).
The parts to be bonded must have a very accurate fit.
Apply from nozzled dark bottle (PE, PP, PA type, no PVC type); after a short holding time the bond is locked in position and a pressure of at least 100 g/cm² adherend is applied.
It may be diluted with KM.
Then expose the joined parts to a suitable light source.
Not get into closed cavities (e.g. double glazing, tube interiors) since the curing is severely hampered at such sites and there is a risk of stress cracking in the bonded parts.
Clean the implements with K 90 or KM thinner.
The maximum pot life in an open tin is about 10 min because its composition deteriorates by evaporation.
Material has to be at room temperature (18-20°C) before use.

Typical Values

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|-----------------------------|---|
| Brookfield viscosity (20°C) | 1600 – 1800 mPa.s |
| Density (20°C) | ≅ 1,00 g/cm ³ |
| Colour | clear to yellowish; colour does not affect bonding properties |
| Refractive Index | ≅ 1,42 |
| Tensile Shear Strength | 25 – 28 MPa 30 MPa annealed 5h at 80°C |
| Pot – life | 120 min exposed to diffuse ambient lighting |
| Storage Stability | 1 year if correctly stored |
| Stored | keep container tightly closed in a cool place, max at 25°C keep in freezer for greater certainty keep away from light |
| Packaging | tin (box : 6 x 1 litres) |
| Curing illuminant system | curing period at 20°C and 20 cm bond/lamp |
| UVA tanning lamp (Sunbed) | 15 min UVA : 315 – 390 nm UVA flux : 42 W – 23 mW/cm ² |

Notes

For further information on safety measures and on disposal, see Safety Data Sheet.
Our technical advice on the application is given without obligation.
The buyer is responsible for their use and processing, technical data sheet are typical values subject to alteration.