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## TECHNICAL DATA SHEET

# PUROK VX60-75

## TECHNICAL CHARACTERISTICS

Base	Hybrid methacrylate
Appearance	White (adhesive) Cream (activator)
Viscosity	80,000 - 85,000
Mix Ratio:	1:1
by volume	1:1
by weight	1:1
Density	0.97 g/cm <sup>3</sup>
Working Time	25 - 32 minutes
Fixture Time	60 - 75 minutes
Full Cure	24 hours
Gap Fill	1mm - 3mm
Hardness (Shore D)	68
Elongation	19%
Tensile Shear Strength	20.7 MPa
Service Temperature	-40°C to +180°C

## PRODUCT

Purok VX60-75 is a two component hybrid toughened structural methacrylate adhesive for bonding a wide range of plastics, metals and composites. It has over 100% flexibility and so is suitable for bonding dissimilar materials in varying environments.

## APPLICATIONS

- Effective for bonding dissimilar materials e.g. bare metal, painted metal, plastics, glass and ceramics
- In aerospace for the bonding of aluminium brackets to composite panels, and the structural bonding of composite components
- With GRP bonding of bracketry, and bonding to metallic structures
- In the automotive industry for the bonding of composite components to metallic structure or to composite structures



FORGEWAY

## CHARACTERISTICS

- Easy to extrude and flow controlled when mixed
- Gap fill up to 10mm
- High durability
- High impact resistance
- High bond strength with flexibility
- Can withstand powder coating

## PACKAGING

*Colour:* Cream  
*Packaging:* 380ml, 18kg drum or 180kg drum

## SHELF LIFE

9 months in unopened packaging from date of manufacture, in a cool and dry storage place at temperatures between +10°C and +25°C

## ENVIRONMENTAL AGEING

Condition	Lap Shear Strength & Mode of Failure
Initial	21.9 MPa
Environmental Cycle - 30 days	23.8 MPa

Lap shear strength ASTM D 1002 - inox / inox

Environmental cycle = 8 hours at -30°C, 8 hours at +85°C, 8 hours at +30°C at 100% relative humidity

## CHEMICAL RESISTANCE

Lap shear samples manufactured using aluminium (6082), cured for 7 days ambient and then immersed in substrate for 28 days

Water at 23°C	21.0 MPa
Water at 90°C	21.7 MPa
Petrol	21.9 MPa
Acetic Acid (10% concentrate)	19.9 MPa
Xylene	22.4 MPa
Lubricating oil-HD30	21.7 MPa
Paraffin	22.1 MPa

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## LAP SHEAR STRENGTH

<b>Substrate</b>	<b>Average Shear Strength &amp; Failure Mode</b>
Inox / Inox	21.7 MPa - cohesive failure
Aluminium / Aluminium (6082)	22.4 MPa - cohesive failure
ABS / ABS	10.3 MPa - substrate failure
GRP / GRP	11.7 MPa - fibre tear
Aluminium / ABS	14.8 MPa - substrate failure

## SUBSTRATE

Ideal for bonding all types of PVC, polycarbonate, acrylic, fiberglass, PBT, PPO, ABS, FRT, polyurethane, epoxy, wood, RIM, nylon, GRP, Polyesters, gelcoats, styrene, inox, cold rolled steel, aluminium etc.

## APPLICATION

<i>Method:</i>	Manual or pneumatic caulking gun, remove resealable cap and pull trigger until both components are extruded, screw on static mixer nozzle. Dispose of first 2cm of mixed adhesive. After application remove nozzle and replace cap. To restart repeat these instructions.
<i>Application temperature:</i>	+5°C to +35°C
<i>Repair with:</i>	Purok VX60-75

## HEALTH AND SAFETY

Always use in well ventilated areas.  
The mixing of the adhesive and hardner starts a chemical reaction which is exothermic. (15mm thickness and greater can generate temperatures of over 120°C)

The variability of materials, substrates and conditions of use is such that no warranty of their functionality for a specific application can be deducted from this information, written recommendation or any other type of suggestion offered. Each user has the responsibility to complete adequate evaluations on the efficacy of the materials offered by Forgeway, of its products, services, recommendations and suggestions for the specific application need, and must accomplish sufficient testing to ascertain that the final product will be safe and sound for the final intent of the end-user.

