PROTAC®
Engineering Adhesives, Industrial Sealants

Protac 7420 Structural Acrylic

Description

Protac 7420 is a two-component, 100% reactive, toughened structural methacrylate adhesive specifically formulated for bonding wide variety of metals, thermoplastics, thermosets, and composite assemblies.

Feature

10:1 mix ratio, non-sagging thixotropic formulation.
Excellent impact, peel and shear resistance.
High strength, high elongation with excellent load distribution.
Excellent low and high temperature properties.
Room temperature cure with 4-6 minute working time.
Achieves 80% ultimate strength in 18 minutes.

Applications

Ideal for bonding all types of PVC, Polycarbonate, Acrylic, Fiberglass, PBT, PPO, ABS, FRT, Polyurethane, Epoxy, Wood, RIM, Nylon, FRP, Polyesters, Gelcoats, Styrene, Stainless Steel, Carbon Steel, Galvanized Steel, etc.
Ideal for automotive components, transportation industry, sporting goods, electronics parts, tool handles, appliances, computer assemblies, electrical components, furniture, marine assemblies, plastic fabrications, sign & display, composite assemblies, etc.

Physical properties – uncured adhesive

	Liquid	**Adhesive**	**Activator**
	Appearance	Milky-White	Off-White/Blue/Black
	Viscosity	100, 000 – 125,000	50,000– 70,000
	at 25 ^{0}C, Brookfield RVT		
	Flash Point (TCC), ^{0}C	10	10
	Density (gm/ml)	0.96	1.07
	Mix Ratio by Volume	10.0	1.0
	By Weight	8.9	1.0

Physical properties – cured adhesive

	Gap Fill	Up to 10mm
	Shore Hardness	73D ASTM D 2240
	Elongation	95%
	Tensile Shear Strength	21.4 MPa DIN 53283
	Adhesive Tensile Shear (Steel/Steel)	21.4 MPa
	Adhesive Tensile Shear (Al/Al)	20.0 MPa
	Adhesive Tensile Shear (ABS/ABS)	8.3 MPa
	Adhesive Tensile Shear (FRP/FRP)	11.8 MPa
	Adhesive Tensile Shear (Al/ABS)	14.8 MPa
Cure Characteristics	Working Time	4-6 minutes
	Fixture Time	15 –18 minutes
	Functional Cure	1 – 3 hours
	Full Cure	24 hours

Cure Characteristics	Mixed Density (gm/ml)	0.98
	Service Temperature	-40 ^{0}C to 125 ^{0}C

Application

All surfaces must be clean, dry, dust and grease free. Best result will be achieved with surfaces that have been lightly abraded immediately prior to bonding.
Proper mixing is required for the curing and adhesive strength development.
Excess adhesive can be wiped away with organic solvents. Adhesive bond should be allowed to develop full strength before subjecting to any service loads.

Packaging

Available in 50ml and 400ml cartridges. This product is also available in pales and drums to use with dispensing equipment.

Storage

Store product in the unopened container in a dry location. Ideal storage temperature range is 8 °C to 21 °C. Storage below 8 °C or greater than 28 °C can adversely affect product properties.

Safety

Consult the Material Safety Data Sheet.

Data ranges

The data contained in this data sheet may be reported as typical value and/or range. Values are based on actual test data and are verified on a regular basis.

Notes

The information contained herein is produced in good faith and is believed to be reliable but is for guidance only. Novachem Ltd. and its agents cannot assume liability or responsibility for results obtained in the use of its product by persons whose methods are outside or beyond our control. It is the user's responsibility to determine the suitability of any of the products and methods of use or preparation prior to use mentioned in our literature and furthermore the user's responsibility to observe and adapt such precautions as may be advisable for the protection of personnel and property in the handling and use of any of our products.