



High Strength Epoxy Adhesive Gel

Technical Data Sheet

DESCRIPTION	Megapoxy 69 is a translucent, non-sag gel type epoxy structural adhesive for bonding metals to metals, metals to concrete and masonry, assembly of granite and marble fabrications, and many other civil engineering applications requiring superior bond strengths. Megapoxy 69 is also ideal for structural timber joinery and applications in the marine environment. It retains its high strength after repeated high impact forces.	
RECOMMENDED APPLICATIONS	Bonding <ul style="list-style-type: none">• Timber• Metal to metal• Natural Stone• Bricks and ceramics• Fibreglass• Aluminium	Filling and Repair <ul style="list-style-type: none">• Splits and Cracks• Knot Holes• Infills• Stone voids• Concrete column• Steel
PROPERTIES	Mixing Ratio by Volume	1 Part A to 1 Part B
	Work Time at 25°C:	45 minutes
	Minimum Cure Time at 15°C	48 hours
	Minimum Cure Time at 25°C	24 hours
	Minimum Cure Time at 35°C	12 hours
	Minimum Application Temperature	10°C
	Colour Part A	White
	Colour Part B	Light Yellow
	Appearance Mixed	Light Yellow
CURED PROPERTIES	Ultimate Compressive Strength - ASTM C579	120MPa
	Bond Strength Concrete - ASTM D4541	>3MPa
	Tensile Bond Strength Steel - ASTM D897	19MPa
	Modulus of Elasticity - ASTM C579	1GPa
	Flexural Strength - ASTM D790-18	66MPa
	Tensile Strength - ASTM D638-22	31MPa
	Tensile Lap Shear Strength - ASTM D1002-00	17MPa (steel to steel)
	Tensile Lap Shear Strength - ASTM D1002-00	16MPa (steel to aluminium)
	Tensile Lap Shear Strength - ASTM D1002-00	14MPa (aluminium to aluminium)
	Hardness - Shore D - ASTM D2240-00	70
	Dielectric Strength (kV/mm)	10.7
	Surface Resistivity (Ohm) - ASTM D257	10 ¹²
	Volume Resistivity (Ohm.cm)	2.81 x 10 ¹¹
	VOC (g/l) - ASTM D3960	3

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CHARACTERISTICS	<ul style="list-style-type: none"> • Very Low VOC • Smooth and easily workable • Simple 1:1 mix ratio • Creamy texture, blends easily • Non sag on vertical surfaces or overhead surface • Very high strength permanent bonds • Excellent tensile and compressive strengths, superior to concrete • Excellent chemical resistance
SURFACE PREPARATION	<p>Concrete</p> <p>Concrete should be free from grease and oil. If necessary, clean with industrial heavy duty degreaser. When clean, remove surface laitance. This is best done by mechanical abrasion such as scabbling, grit blasting or grinding. If this is not possible acid etching must be carried out. Mix concentrated hydrochloric acid with equal volume of water and spread at the rate of 0.5 litre per square meter of concrete surface. Allow to react for about 10 minutes and wash the area thoroughly and scrub with a stiff bristled broom to remove loose sand. Allow to dry for 24 hours. For maximum adhesion the concrete should be surface dry.</p> <p>Metal Surfaces</p> <p>Metals should be grit blasted to AS 1627.2.2002. If this is not possible, mechanically abrade the surface to a clean, bright metal surface. Once this abrasion is complete, degrease the surface by flooding with an industrial grade degreaser. Wire brushing is not entirely satisfactory and gives minimal adhesion only.</p> <p>Coated Surfaces</p> <p>It is recommend to remove all coatings prior to bonding, bonding to coated surfaces will give inferior bond strengths compared to bonding directly to a prepared substrate.</p> <p>Concrete:</p> <p>The surface may be either flame-cleaned, or mechanically treated with a scutching tool, to remove all traces of paint. Complete the preparation by diamond grinding or scabbling.</p> <p>Metals:</p> <p>Steps should be taken to remove all paint and/or galvanizing. Good quality paint stripper should be used, followed by grit blasting or grinding to a bright metal finish.</p>
IMPORTANT INFORMATION	<p>It is essential that the correct mixing ratio be used and that the Part A and Part B are thoroughly mixed together before use, Inaccuracies and poor mixing will result in lower physical properties of the cured system and, if the error is sufficiently large, the system may not cure satisfactorily and discolour on ageing.</p>
CLEANING	<p>To keep mixing implements and working tools clean, use Megapoxy Thinners. Use disposable rubber gloves to protect hands and maintain proper industrial hygiene. For further details refer to the Megapoxy 69 Safety Data Sheet.</p>
PACKAGING	<p>Megapoxy 69 is available in 1 litre, 4 litre & 20 litre kits. Product should be stored in cool dry store.</p>
TECHNICAL SERVICE	<p>All purchasers of Megapoxy Products, are encouraged to avail themselves of our Technical Service for our Megapoxy Products. The information in this Bulletin is correct at time of publication, however continual research and development is being carried out and specs may change without notice.</p>