TECHNICAL DATA SHEET
Wired 4 Signs USA M440

* Parameters tolerance +/- 7%

Wired 4 Signs USA +1 (865) 339 4956 info@w4susa.com www.w4susa.com 7669 Clinton Highway, Powell, Tennessee, 37849

Product Description

The M440 series is based upon a new generation two component 10:1 low shrinkage structural methacrylate Adhesive. Once mixed, this system cures rapidly to form a tough and flexible bond, with high peel, fatigue and impact strength, even at low temperatures. This products high elongation and superior adhesion.

Sub Product Reference	Open Time	Handling Strength
M440-05	4-6 Minutes	10-12 Minutes
M440-10	12 – 15 minutes	25 – 30 minutes
M440-30	30-35 Minutes	80-90 Minutes
M440-60	60-80 Minutes	100-120 Minutes

Typical Applications

M440 series products are very versatile, and can bond a wide variety of substrates without the need for surface primers or conditioners. Should the surface require aditional adhesion and temperature resistance the P100 primer o ers a further advancement to the level of adhesion. Typical examples shown below

- Bonding moulded automotive ABS components
- Bonding GRP and FRP strengtheners
- Bonding stuctural aluminium sections
- Bonding metal fasteners to Polyester
- Bonding two part GRP sections
- Bonding surface fastners to composite sections

Instructions For Use

1. Always consult MSDS before using the **M440 series** for the first time.
2. Carry out surface preparation where required.
3. Remove nut, attach mixer nozzle.
4. Dispense su cient adhesive to ensure equal mix and uniformed color.
5. Apply adhesive to one suface and assemble components carefully, clamping if required.
6. It is always easier to remove any excess adhesive prior to cure using a suitable cleaner.
7. Allow the adhesive su cient time to achieve handling strength before moving or unclamping components.

Properties of Uncured Material

Resin	Methyl Methacrylate
Colour	White & White
Appearance	Thixotropic Gel
Viscosity Brookfield T Bar	110,000 to 130,000cps
Cure System	Peroxide
SG Part A	1.03
SG Part B	1.09

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Performance of Cured Material

ASTM D1002 Lapshear	
Aluminum	19.0 Nmm²
Stainless Steel	19.2 Nmm²
Mild Steel	22.4 Nmm²
GRP	Substrate Failure
ABS	Substrate Failure
Acrylic	Substrate Failure
Polycarbonate	Substrate Failure
Gap Fill	0.8 to 5mm
Temperature Range	-55°C to 120°C
Shore Hardness	65 Shore D
Elongation at break (ISO 527 1A)	150%

Compatible Substrates

Aluminum	Wood
Stainless Steel	Granite
Mild Steel	Marble
UPVC	Urethanes
Polyesters	Vinyl Esters
ABS	Glav/Zinc Coated (With Primer)
Acrylic	Thermoset Plastics
FRP	Gelcoats
GRP	Epoxy laminate

Curing Cycle

Once mixed at the 10:1 ratio the working time of the M440 series is the period whereby the adhesive remains fluid and is easily transferrable between two or more mating surfaces. Temperature, volume and substrate have a direct e ect on the length of this period as the Bondchem M440 cures by an exothermic reaction. Higher temperatures and larger volumes speed the reaction causing a reduction in open and cure time. Lower temperatures and smaller volumes slow the reaction time extending Both the open time and ultimate full cure time.

Packaging

M440 series is available in 50ml and 490ml PBT cartridges. We can also supply this material in 20kg and 200kg drums for use with bulk.

Storage & Shelflife

M440 series products should be stored unopened in a cool dry location, out of direct sunlight. Stored correctly, this Grade can o er a 9 month shelf life from manufacture.

Health and Safety in Use

M440 series products are formulated using a methyl methacrylate and should not be used without consulting the MSDS, which contains full information regarding the use of this product, including Transport, Disposal, Toxicological, Exposure Controls, Accidental Release and First Aid measures essential to the safe use of this product.