



# INSTANT TOUGH BLACK MV

## ONE COMPONENT, MEDIUM VISCOSITY, BLACK TOUGHENED ADHESIVE

TECHNICAL SHEET - 20/03/2026



### SMART BENEFITS

- Instant Adhesion
- High Strength
- Multi-material adhesion
- Rubber and metal bonding
- Impact resistance
- Peel resistance

### DESCRIPTION

**Instant Tough Black MV** is a black rubber-toughened instant adhesive designed for high-performance bonding applications across a wide range of materials, including metals and rubbers. The product is specially formulated to provide increased impact and peel resistance, along with improved flexibility.

### METHOD OF USE

- Before applying the adhesive, make sure the surface is clean, dry and free of grease.
- Apply adhesive to one of the surfaces. Do not use items like tissues or a brush to spread the adhesive.
- Assemble the parts with proper alignment as the short fixture time leaves little opportunity for adjustment.
- Bonds should be held fixed or clamped until adhesive has fixture.
- Product should be allowed to develop full strength before subjecting to any service loads (typically 24 to 72 hours after assembly, depending on bond gap, materials and ambient conditions).

### PROPERTIES

| TECHNICAL DATA                                         |         |                      |
|--------------------------------------------------------|---------|----------------------|
| CHARACTERISTICS                                        |         | VALUE                |
| Base                                                   |         | Ethyl Cyanoacrylate  |
| Viscosity<br>Brookfield, 25 °C,<br>Spindle 21, 100 rpm | [mPa·s] | 240 – 400            |
| Color                                                  |         | Black colored liquid |
| Specific Gravity<br>ASTM D1875 @ 23 °C                 | [g/ml]  | 1.10                 |
| Impact Resistance<br>(after 24 h) - ISO 9653           | [kJ/m²] | 22.5                 |

### FIXTURE TIME @ 23 °C

| Substrate       |     |           |
|-----------------|-----|-----------|
| Beech Wood      | [s] | 230 – 300 |
| ABS             | [s] | 50 – 90   |
| Polycarbonate   | [s] | 60 – 170  |
| Aluminium A5754 | [s] | 30 – 200  |
| Mild steel      | [s] | 60 – 140  |
| NBR*            | [s] | 10 – 40   |
| EPDM*           | [s] | 5 – 40    |
| Neoprene*       | [s] | 15 – 40   |

\*1 Kg load for 10 s.

| BONDING PERFORMANCE<br>Tensile Shear strength (ISO 4587) - Cured 24 h @ 23°C |         |           |
|------------------------------------------------------------------------------|---------|-----------|
| Substrate                                                                    |         |           |
| Beech Wood                                                                   | [N/mm²] | 13 – 16 * |
| ABS                                                                          | [N/mm²] | 9 – 11 *  |
| Polycarbonate                                                                | [N/mm²] | 12 – 14 * |
| PVC                                                                          | [N/mm²] | 12 – 15 * |

|                                |                      |             |
|--------------------------------|----------------------|-------------|
| Phenolic                       | [N/mm <sup>2</sup> ] | 11 - 14 *   |
| Aluminium A5754                | [N/mm <sup>2</sup> ] | 18 - 22     |
| Grit Blasted Mild steel (GBMS) | [N/mm <sup>2</sup> ] | 18 - 24     |
| NBR                            | [N/mm <sup>2</sup> ] | 0.9 - 1.1 * |
| EPDM                           | [N/mm <sup>2</sup> ] | 0.9 - 1.2 * |
| Neoprene                       | [N/mm <sup>2</sup> ] | 0.7 - 0.9 * |

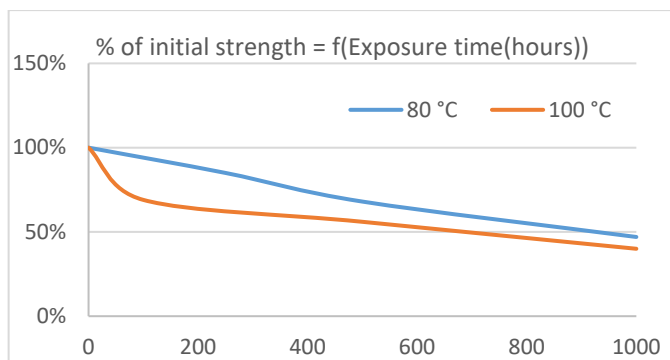
\*Substrate failure

| BONDING PERFORMANCE<br>Peel strength (ISO 11339) - Cured 24 h @ 23°C |        |             |
|----------------------------------------------------------------------|--------|-------------|
| SUBSTRATE                                                            |        | @ 22 °C     |
| Mild Steel                                                           | [N/mm] | 2.3 - 3.0   |
| EPDM                                                                 | [N/mm] | 0.7 - 0.9 * |

\* Substrate Failure

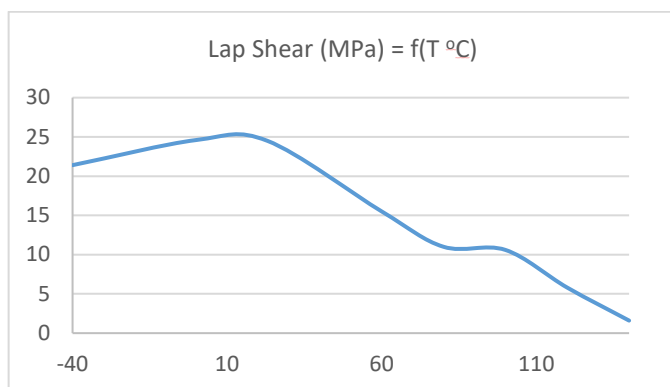
### HEAT AGEING

The graph below shows the heat aging results. The adhesive was aged at the temperature indicated, tested at 22 °C and cured for one week. The lap shear strength was tested according to ISO 4587 on grit-blasted, mild steel (GBMS).



### HOT STRENGTH

The graph below shows the adhesive performance on grit-blasted mild steel (GBMS) at various temperatures. The adhesive was cured for one week at 22 °C. The lap shear strength was tested according to ISO 4587. The strength test was performed in a climatic chamber that was set up for 30 minutes before testing at the indicated temperatures.



### CHEMICAL/SOLVENT RESISTANCE

Aged under conditions indicated and tested on GBMS.

| % of Initial Strength vs. Exposure Time (hours) and vs. Type of Contaminant |       |                       |       |        |
|-----------------------------------------------------------------------------|-------|-----------------------|-------|--------|
| Testing on GBMS                                                             |       | % of Initial Strength |       |        |
| ENVIRONMENT                                                                 | TEMP  | 100 h                 | 500 h | 1000 h |
| Water                                                                       | 23 °C | 67                    | 51    | 51     |
| Motor Oil                                                                   | 82 °C | 62                    | 56    | 43     |

### HUMIDITY RESISTANCE

Aged under conditions indicated and tested @ 23 °C after curing for 1 week @ 23 °C.

| % of Initial Strength vs. Exposure Time (hours) |       |                       |       |        |
|-------------------------------------------------|-------|-----------------------|-------|--------|
| 95% HR, 40 °C                                   |       | % of Initial Strength |       |        |
| ENVIRONMENT                                     | TEMP  | 100 h                 | 500 h | 1000 h |
| GBMS                                            | 40 °C | 71                    | 51    | 48     |

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### SMART HELP

Please contact your local representative

