

## TECHNICAL DATA SHEET

|   |                           |                 |           |          |
|---|---------------------------|-----------------|-----------|----------|
|  | TDS No:                   | <b>014</b>      | Issue No: | <b>1</b> |
|   | Issue Date:               | <b>14/01/14</b> |           |          |
|   | Revision Date:            | <b>14/07/16</b> |           |          |
|   | Page No:                  | <b>1 of 4</b>   |           |          |
| <b>PRODUCT</b>  | <b>NovaWeld SignFix 7</b> |                 |           |          |

### IDENTIFICATION OF THE SUBSTRATE/PREPARATION & COMPANY

|               |  |                   |
|---------------|--|-------------------|
| Product Name: | NovaWeld SignFix 7                     |                   |
| Company:      | Innova Solutions Limited               | Tel: 01282 867390 |
|               | Lower Draught Gates Farm, Burnley Road | Fax: 01282 861077 |
|               | Trawden, Lancashire, BB8 8PW           |                   |

### DESCRIPTION

**NOVAWELD SignFix 7** is a new generation of 2 part 1:1 component mixing structural acrylic adhesives. It is fast setting when mixed via a static mix nozzle at room temperatures. NovaWeld SignFix 7 demonstrates improved impact strength, peel shear and tensile resistance and exterior performance. Because it is a thixotropic, non-sag adhesive, the mixed material is ideal for all types of gap filling requirements on steel, aluminium, polycarbonates and general plastics. It is also very good for vertical surface bonding without running. NovaWeld SignFix 7 exhibits excellent structural strength even without priming the surfaces. Owing to its macro molecular structure, the bonds formed show excellent durability and high peel strength even when filling large gaps and demonstrate excellent solvent and environmental resistance to moisture, hydro-carbon fuels, lubricants, cleaning chemicals and fluids.

### TYPICAL USAGES OF NOVAWELD SIGNFIX 7

Structural bonding in the sign industry of most signmaking materials especially mild and stainless steels, aluminium, polycarbonate and acrylic sheets, composite panels and even stone and ceramics where high impact strengths are needed. The thixotropic nature of NovaWeld SignFix 7 is ideal for bonding Bighead fasteners and other locators. Other applications include wind turbines, vehicle roofs, fibreglass, sports goods, automotive spoilers, vents, housings. The high temperature adhesive formulation allows for bonding metal parts prior to powder-coating and oven stoving cycles.

### APPLICATION INSTRUCTIONS

- Always consult MSDS before using SignFix 7 for the first time.
- Carry out surface preparation where required.
- Remove cap, and attach mixer nozzle.
- Dispense sufficient adhesive to ensure equal mix.
- Apply adhesive to one surface and assemble components carefully, clamping if required.
- It is always easier to remove any excess adhesive prior to cure using a suitable cleaner. Allow the adhesive sufficient time to achieve handling strength before moving or unclamping

#### Disclaimer

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.

## TECHNICAL DATA SHEET

|   |                           |                 |           |          |
|---|---------------------------|-----------------|-----------|----------|
| <br>bonding people fixing problems | TDS No:                   | <b>014</b>      | Issue No: | <b>1</b> |
|   | Issue Date:               | <b>14/01/14</b> |           |          |
|   | Revision Date:            | <b>14/07/16</b> |           |          |
|   | Page No:                  | <b>2 of 4</b>   |           |          |
| <b>PRODUCT</b>  | <b>NovaWeld SignFix 7</b> |                 |           |          |

### CURING CYCLE

Once mixed at the 1:1 ratio the working time of the SignFix 7 is the period whereby the adhesive remains fluid and is easily transferable between two or more mating surfaces. Temperature, volume and substrate have a direct effect on the length of this period as the SignFix adhesive 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.

### COMPATIBLE SUBSTRATES

|                 |                    |
|-----------------|--------------------|
| Aluminium       | Wood               |
| Stainless steel | Granite            |
| Mild steel      | Marbl              |
| UPVC            | Urethanes          |
| Polyesters      | Vinyl esters       |
| ABC             | Glav / Zinc coated |
| Acrylic         | Thermoset          |
| FRP             | Gelcoa             |
| GRP             | Epoxy laminate     |

#### Disclaimer

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.

## TECHNICAL DATA SHEET

|   |                |                           |   |          |
|---|----------------|---------------------------|---|----------|
| bonding <span style="color: green;">people</span> fixing <span style="color: green;">problems</span><br> | TDS No:        | <b>014</b>                | Issue No:                                   | <b>1</b> |
|   | Issue Date:    |                           | <b>14/01/14</b>                             |          |
|   | Revision Date: |                           | <span style="color: green;">14/07/16</span> |          |
|   | Page No:       |                           | <b>3 of 4</b>                               |          |
| <b>PRODUCT</b>  |                | <b>NovaWeld SignFix 7</b> |   |          |


### TYPICAL UNCURED PROPERTIES NOVAWELD SIGNFIX 7

|                            |                            |
|----------------------------|----------------------------|
| Resin                      | Methyl Methacrylate        |
| Colour                     | Yellow / White             |
| Appearance                 | Thixotropic Gel            |
| Viscosity brookfield t bar | 400,000 to 600,000cps      |
| Cure system c              | Exothermic                 |
| Open time                  | 7 minutes @ 20°C 10g mass  |
| Handling strength          | 12 minutes @ 20°C 10g mass |
| SG Part A                  | 0.96                       |
| SG Part B                  | 0.91                       |

#### Disclaimer

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.

## TECHNICAL DATA SHEET

|   |                |                           |                 |          |
|---|----------------|---------------------------|-----------------|----------|
|  | TDS No:        | <b>014</b>                | Issue No:       | <b>1</b> |
|   | Issue Date:    |                           | <b>14/01/14</b> |          |
|   | Revision Date: |                           | <b>14/07/16</b> |          |
|   | Page No:       |                           | <b>4 of 4</b>   |          |
| <b>PRODUCT</b>  |                | <b>NovaWeld SignFix 7</b> |                 |          |

### TYPICAL CURED PROPERTIES NOVAWELD SIGNFIX 7

|  |                           |
|--|---------------------------|
| ASTM D1002 lapshear  | Average over 16 tests     |
| Aluminium  | 20.4Nmm <sup>2</sup>      |
| Stainless steel  | 38.4Nmm <sup>2</sup>      |
| Mild steel   | 38.4Nmm <sup>2</sup>      |
| GRP  | Substrate failure         |
| ABS  | Substrate failure         |
| Acrylic  | Substrate failure         |
| ASTM D638 tensile  | Up to 30 Nmm <sup>2</sup> |
| Gap fill   | 4mm                       |
| Standard temperature   | -55°C to 120°C            |
| Paint bake cycle   | 20 minutes @ 220°C        |
| Aluminium lapshear following moist cataplastm<br>7 days @ 70°C | 26.7 MPA                  |
| Peel Strength Aluminium  | 6KN/m                     |
| Shore hardness   | 75 shore D                |

#### Disclaimer

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.