

## DESCRIPTION

**TECHNO BOND 3054 is a two component 100% solid elastomeric urethane adhesive. It is a thixotropic liquid which pot life is relatively short to obtain a good R.T. cure as well as a fast cure at 40-60°C.**

**TECHNO BOND 3054 is an excellent bonding agent for expanded polystyrene and ABS in all possible combinations. It can also be used for bonding other types of materials such as metal, rubber, plastics among others. . Consult your POLYMERES TECHNOLOGIES representative for further information. The bond will be permanent and insoluble with good impact and temperature thermal shock resistance.**

## CHARACTERISTICS

- **Waterproof**
- **Easy to mix**
- **Resistant to wide temperature changes**
- **Efficient surface wetting**
- **Easy to use**
- **Fast cure at 40-60°C**

## APPLICATION INSTRUCTIONS

**All surfaces must be sound, solid, dry and free of all contaminants such as grease, oil, dust, etc.**

**Mix two part A and one part B per volume (or 100 part A with 60 parts of B by weight) until color is uniform.**

**Physical properties can be changed if mix ratio varies.**

**Uncured material can be easily cleaned with 205 or 208 solvents.**

**Contact POLYMERES TECHNOLOGIES for more information.**

## PRECAUTIONS

- **Consult Material Safety Data Sheet.**
- **Do not mix more material than possible to apply within the recommended pot life.**
- **Ensure proper ventilation.**
- **Curing time of adhesive will be extended if used at temperature lower than 20°C.**
- **Shelf life of material in original unopened containers is one (1) year. Shelf life of part B partial containers will be prolonged if kept under dry nitrogen blanket.**
- **It is recommended to follow Provincial and Federal safety regulations. In case of eye contact, rinse well with water, in case of skin contact, rinse with soap and water. Keep away from children.**

| <b>TYPICAL PROPERTIES</b><br>(at 22°C)     |                                     |                                             |                        |                                  |
|--------------------------------------------|-------------------------------------|---------------------------------------------|------------------------|----------------------------------|
|                                            |                                     | <b>PART A</b>                               | <b>PART B</b>          | <b>MIXED</b>                     |
| <b>Viscosity (cps)</b>                     | <b>Brookfield</b>                   | <b>B.C.: 225,000</b><br><b>H.C.: 20,000</b> | <b>-</b><br><b>600</b> | <b>thixo</b><br><b>3000-5000</b> |
| <b>Density</b>                             | <b>g/cm<sup>3</sup></b>             | 1,00                                        | 1,21                   | <b>1.08</b>                      |
| <b>Consistency</b>                         |                                     | <b>Liquid</b>                               | <b>Liquid</b>          | <b>Liquid</b>                    |
| <b>Specific gravity (g/cm<sup>3</sup>)</b> |                                     | <b>1.00</b>                                 | <b>1.21</b>            | <b>1.08</b>                      |
| <b>Mixing Ratio</b>                        | <b>volume</b>                       | <b>2</b>                                    | <b>1</b>               | <b>2/1</b>                       |
|                                            | <b>weight</b>                       | <b>100</b>                                  | <b>60</b>              | <b>60</b>                        |
| <b>Colour</b>                              |                                     | <b>Grey</b>                                 | <b>Light Yellow</b>    | <b>Grey</b>                      |
| <b>Pot Life (minutes)</b>                  | <b>Mass 200 cc</b><br><b>@ 23°C</b> | <b>12</b>                                   |                        |                                  |
| <b>Gel Time (hours)</b>                    | <b>6 mils à</b><br><b>5°C</b>       | <b>48</b>                                   |                        |                                  |
|                                            | <b>20°C</b>                         | <b>6</b>                                    |                        |                                  |
|                                            | <b>40°C</b>                         | <b>4</b>                                    |                        |                                  |
|                                            | <b>60°C</b>                         | <b>2</b>                                    |                        |                                  |
| <b>Full Cure</b>                           | <b>at 25°C</b><br><b>at 60°C</b>    | <b>7</b><br><b>&lt; 1</b>                   |                        |                                  |

\*After material has solidified full cure can be accelerated at 51.7°C (125°F).

| <b>PHYSICAL PROPERTIES</b><br>(solid state) 7 days after cure at 25°C |                           |                 |
|-----------------------------------------------------------------------|---------------------------|-----------------|
| <b>TEST</b>                                                           | <b>METHOD</b>             | <b>RESULTS</b>  |
| <b>Hardness (Shore A)</b>                                             | <b>ASTM D-2240</b>        | <b>90</b>       |
| <b>Hardness @150°C-302°F</b><br><b>after 30 minutes</b>               | <b>Shore A</b>            | <b>55</b>       |
| <b>Tensile Strength (MPa)</b>                                         | <b>ASTM D-638 type IV</b> | <b>9</b>        |
| <b>Tensile Elongation (%)</b>                                         | <b>ASTM D-638 type IV</b> | <b>&gt; 300</b> |
| <b>Tear Strength (N/mm)</b>                                           | <b>ASTM D-624 type C</b>  | <b>30</b>       |
| <b>Water Absorption (%)</b><br><b>(24 hours immersion)</b>            | <b>ASTM D-570</b>         | <b>0.80</b>     |

<sup>1</sup> 1 MPa = 145 lb/po<sup>2</sup>

<sup>2</sup> 53.4 KJ/m = 1 lbF/po<sup>2</sup>

<sup>3</sup> 1 kPa = .145 lb/po<sup>2</sup>

#### **GARANTIEE**

Seller makes no warranty of any kind, express or implied, as to the merchantability, fitness for any particular purpose, or any other matter with respect to the product TECHNO BOND 3054. Since conditions of use are beyond seller's control, buyer assumes all risk of use of this product. Under no circumstances will seller be liable for consequential or incidental damages arising out of the use of this product. Seller's sole obligation shall be to replace the product if found to be defective. It is the user's responsibility to determine the suitability for use of this product under the conditions present at the time of application. M.S.D.S. available upon request.

