

# **ENGINEERING ADHESIVES**

# CILBOND<sup>®</sup> 40 Series

# CILBOND 40 Series products are one-coat polyurethane-tosubstrate bonding systems.

CILBOND 40 Series one-component systems provide high-performance elastomer polyurethane (PU) bonding for hot- and cold-curing castable systems, sprayable urethanes, millable systems, and thermoplastic PUs. As a global leader in PU bonding, CILBOND one-coat PU bonding systems deliver ultimate performance from an elastomer while also providing benefits over competing two-part primer and topcoat systems.

## **FEATURES**

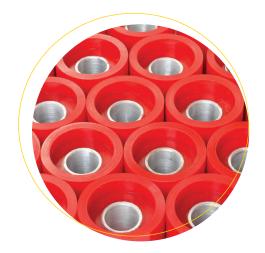
- One-coat solution
- High-temperature resistance in service
- High pre-bake resistance
- Extreme chemical resistance
- Bonds wide range of PU systems
- Sprayable with CILBOND Diluent 4000
- Clear or pigmented color offerings

## **PU TO SUBSTRATE APPLICATIONS**

- Rollers
- Wheels/Casters
- Couplings
- Pipe linings/Coatings
- Mining sifter grates
- Suspension bushings
- Conveyor belts
- Seals and gaskets
- Marine band restrictors

## BENEFITS

- Reduce process cost and increased productivity
- Improve performance on high-temp applications
- Reduce rework and expand process window
- Protection of substrate to extend product life
- Reduce product complexity
- Allows for automation and uniform coating
- Eliminates visual bond line or improve QC process with pigment



# CILBOND one-coat PU bonding system







**33%** Decrease in Material Costs



#### **CILBOND 48**

CILBOND 48 is a clear, single-component bonding agent for both cold and hot-cure (65-275°F/20-135°C) castable polyurethane systems and injection-molded thermoplastic polyurethane (TPU) systems to metal and plastic substrates. Offering exceptional corrosion resistance, CILBOND 48 is fast-drying, can be used without a pre-bake, and has been developed for use in dynamic conditions, where hydrolytic stability is important.

#### **CILBOND 49SF**

CILBOND 49SF is a single-component bonding agent for hot-cure (>160°F/70°C) castable polyurethane elastomers and injection molded TPU systems. Pigmented red, CILBOND 49SF is the industry benchmark for high-performance urethane bonding. Developed to bond to all metals, polyesters, polyamides, epoxies and fiberglass reinforced plastics, CILBOND 49SF is recommended by leading urethane houses, offering in-service heat-resistance up to 265°F/130°C (or to 350°F/180°C when used with the CILCURE B additive).

A clear version of CILBOND 49SF is also available.

#### **PROCESSING & PERFORMANCE PROPERTIES**

| Properties               | Cilbond 48     | Cilbond 49SF   |
|--------------------------|----------------|----------------|
| Casting temperature      | 68°F - 360°F   | 158°F - 360°F  |
| Plus Cilcure B           |                | 104°F - 360°F  |
| Pre-bake resistance      | 48 hrs @ 212°F | 48 hrs @ 212°F |
|                          | 24 hrs @ 230°F | 24 hrs @ 230°F |
|                          | 16 hrs @ 266°F | 16 hrs @ 266°F |
| Salt spray resistance    | 700 hrs        | 450 hrs        |
| Plus Cilcure B           |                | 700 hrs        |
| Boiling water resistance | 400 hrs        | 350 hrs        |
| Plus Cilcure B           |                | 500 hrs        |
| Creep resistance         | Excellent      | Very Good      |
| Plus Cilcure B           |                | Excellent      |
| Impact resistance        | Good           | Very Good      |
| Temperature resistance   | Good           | Excellent      |
| Handling of shrinkage    | Good           | Excellent      |
| Appearance               | Clear          | Red            |

#### For more information, please contact Nathan Whitford, +1-517-420-8929, Nathan.Whitford@hbfuller.com

#### **ABOUT H.B. FULLER**

Since 1887, H.B. Fuller has been a leading global adhesives provider focusing on perfecting adhesives, sealants and other specialty chemical products to improve products and lives. With fiscal 2017 net revenue of over \$2.3 billion, H.B. Fuller's commitment to innovation brings together people, products and processes that answer and solve some of the world's biggest challenges. Our reliable, responsive service creates lasting, rewarding connections with customers in electronics, disposable hygiene, medical, transportation, aerospace, clean energy, packaging, construction, woodworking, general industries and other consumer businesses. And, our promise to our people connects them with opportunities to innovate and thrive. For more information, visit us at www.hbfuller.com.



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# **CILCURE B**

CILCURE B is a specialty curing agent that combined with CILBOND 48 and 49SF will enhance adhesion to the metal. This improves long term environmental, chemical, and temperature resistance. CILCURE B also is used for highly reactive polyurethane systems used in rotational casting processes. CILCURE B is available in 1kg, 5kg, and 25kg packaging.