









# PRIMERS AND BONDING AGENTS

The Cilbond range of Rubber and Polyurethane to Substrate Primers and Bonding Agents allow engineers to combine the different properties of rubber, urethane, plastic, metal and fabric to develop industrial components with benefits that outweigh the sum of their parts.

This combination of benefits include flexibility, strength, abrasion resistance, chemical resistance, cost and weight - all features critical to the Automotive, Aerospace, Petrochem and Transportation industries that H.B. Fuller serves.

Developed at our in-house research and development laboratory, the Cilbond range of products is at the forefront of technology with respect to performance, versatility and the environment.

The Cilbond range of primers and bonding agents is relied upon in the toughest environments in the following industries:

Aerospace

Automotive

Marine

Defence

Petrochem

Transportation



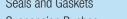
# RUBBER TO METAL BONDING

The rubber to metal bonding technique is used within industry to isolate vibration, reduce shock or to provide a seal for liquids, solids or gases, in potentially demanding environments. With Cilbond, it is possible to achieve an engineering bond capable of surviving extreme environmental attack from chemicals, temperature variations, dynamic stresses and fatigue.

With a product for every compound type and molding technique (including injection, compression, transfer and even post-vulcanization), the Cilbond range provides the rubber industry with the ultimate combination of performance and versatility.

#### **Applications**

- Anti-Vibration Components
- Coil Coating
- Industrial Tank Linings
- Printing Rollers
- **Pump Linings**
- Seals and Gaskets
- Suspension Bushes
- Wheels



## RUBBER TO FABRIC TECHNOLOGIES

The combination of rubber with fabric reinforcement achieves the ultimate combination of torsional strength and flexibility. These properties are utilised in critical automotive and industrial applications such as power transmission belting, conveyor belting and hoses.

Increased operating temperatures and extended life expectancy of these products is possible due to the superior strength and flexibility of Cilbond, a fundamental component in recent belt and hose design.

### POLYURETHANE TO SUBSTRATE BONDING

The superior properties of polyurethane (PUR) systems mean they are the material of choice for engineers looking for the ultimate performance from an elastomer. The Cilbond range of PUR to substrate bonding agents provide the ultimate in bond strength, with 100 % PUR tear achievable whilst under the toughest environment conditions.

With high performance products available for hot and cold curing castable systems and even injection-molded TPUs, H.B. Fuller has established itself as the global market leader in PUR bonding.

### **Applications**

- Conveying Rollers
- Wheels
- Marine Bend Restrictors
- Pump Linings
- Suspension Bushes
- Pipe Coating and Linings
- Printing Rollers
- Seals

## **FRICTION BONDING**

With temperatures ranging from sub-zero to 750 °C in seconds, few environments are tougher than those experienced by the brake pad. Bonded pads must also withstand contact with oils, fuels, and corrosion from salt-spray attack.

Supplied to global manufacturers of Original Equipment and Aftermarket brake pads and clutch plates, H.B. Fuller I Cilbond has a range of water-based products that both exceed the standards required by the automotive industry and out-perform the market's solvent-based equivalents.



## **ONE-COAT TECHNOLOGIES**

Convention states that polymer to substrate bonding agents should always consist of a prime and a top coat. Whilst H.B. Fuller manufacture a wide range of high performance primers and top-coats, our aim is to simplify processes and reduce costs for our customers wherever possible, without compromising quality.

Our developments have therefore focused on achieving the same levels of environmental resistance and rubber tear with one-coat Cilbond systems. Not only are material usage rates substantially reduced, but time and resources are also saved by a reduction in application times and subsequent drying times.



#### **About Cilbond:**

Cilbond has been manufactured in Preston, UK for over 40 years, and is supported by fully equipped technical laboratories and export specialists. Available in over 60 countries, Cilbond can be sourced from authorised distributors and global H.B. Fuller warehousing, with local technical support available.

Our Research and Development Chemists remain fully focused on the next generation of ultra-low VOC and water-based Bonding Agents, to help industry meet sustainability and environmental targets.

Contact Ellsworth today at info@ellsworth.com or call (800)-888-0698 to learn more



