

# LORD® IMB™ 3050 Primer

## Technical Data Sheet

LORD® IMB™ 3050 primer is a single-component functional surface treatment agent designed for bonding addition-cured (platinum-cured) silicone rubber to a variety of metal and compatible plastic substrates during the injection or compression molding process. Compatible plastic substrates include: polycarbonates, polyphenylsulfones, polyetherimides, some polyamides, some elastomers, and other thermoplastics.

### Features and Benefits:

**Versatile** – bonds low surface energy and difficult thermoplastic substrates, like polycarbonate, without the need for pretreatment; bonds a variety of addition-cured silicone rubbers to a wide variety of substrates.

**Durable** – provides a strong, durable bond that, in many instances, has strength equal to or greater than the rubber being molded.

**Easy to Use** – non-settling formula allows for easy application; dries at room temperature to a clear, nearly colorless, film.

**Medical Use** – formula passes ISO 10993-5\*\* cytotoxicity and ISO 10993-10\*\* skin irritation testing.

*\*\*It is the responsibility of the user to determine that the final product complies with the ISO 10993 requirement.*

### Application:

**Surface Preparation** – Remove grease, oil, fingerprints, dust, mold release agents and other contaminants from the surfaces to be bonded. Wear chemical resistant gloves, such as nitrile; avoid latex gloves. Wipe the surfaces with a clean cloth soaked in a solvent such as isopropyl alcohol or heptane. On metal surfaces, a suitable alkaline degreasing agent may be used. Rinse metals and allow the surfaces to thoroughly dry.

Although plasma treatment of thermoplastic substrates is typically not necessary, it can improve the wetting properties of the primer on more difficult, or low surface energy, substrates.

**Mixing** – No agitation is required before or during use. LORD IMB 3050 primer is used full strength for brush, dip and spray applications. If necessary, primer can be diluted with propylene glycol methyl ether (DOWANOL® PM) up to a 1:1 ratio.

For bonding difficult silicones, or for enhanced bond durability during exposure to extreme environments such as steam autoclave, LORD IMB 3040B catalyst can be added to LORD IMB 3050 primer. A mix ratio of 10 parts IMB 3050 primer to 2 parts IMB 3040B catalyst is the recommended starting point. To mix the components, weigh out the appropriate amount of IMB 3050 component into a secondary container. Add the corresponding amount of IMB 3040B component and thoroughly stir until completely mixed. Mixed working life is approximately 24 hours at room temperature.

### Typical Properties\*

Appearance	Clear to Slightly Yellow Liquid
Viscosity, cps @ 25°C (77°F) Brookfield LVT Spindle 1, 60 rpm	≤20
Density kg/m <sup>3</sup> (lb/gal)	930 (7.75)
Solids Content, % by Weight by Volume	5-7 5-7
Flash Point, °C (°F)	14 (57)
Solvents	Propylene Glycol Methyl Ether, Methyl Ethyl Ketone (MEK)

\*Data is typical and not to be used for specification purposes.



ENGINEERING YOUR SUCCESS.

**Applying** – Apply primer by dip, brush or spray methods. The recommended dry film thickness of LORD IMB 3050 primer is 2-5 micron (0.05-0.2 mil).

**Drying/Curing** – Dry primer for 30 minutes at room temperature; do not use IR drying. For faster drying, a convection oven at 65°C (149°F) can be used.

Parts should be molded within 24 hours of primer application. During this time, avoid exposure to excessive humid conditions. Parts should be stored at <50% relative humidity.

**Cleanup** – Use MEK or propylene glycol methyl ether for clean up of uncured primer. Thoroughly cured primer may require solvent immersion for extended periods of time, followed by mechanical abrasion.

## Shelf Life/Storage:

Shelf life is one year from date of manufacture when stored at 21-27°C (70-80°F) in original, unopened container.

## Cautionary Information:

Before using this or any Parker LORD product, refer to the Safety Data Sheet (SDS) and label for safe use and handling instructions.

*For industrial/commercial use only. Must be applied by trained personnel only. Not to be used in household applications. Not for consumer use.*

Values stated in this document represent typical values as not all tests are run on each lot of material produced. For formalized product specifications for specific product end uses, contact the Customer Support Center.

Information provided herein is based upon tests believed to be reliable. In as much as Parker LORD has no control over the manner in which others may use this information, it does not guarantee the results to be obtained. In addition, Parker LORD does not guarantee the performance of the product or the results obtained from the use of the product or this information where the product has been repackaged by any third party, including but not limited to any product end-user. Nor does the company make any express or implied warranty of merchantability or fitness for a particular purpose concerning the effects or results of such use.

WARNING – USER RESPONSIBILITY. FAILURE OR IMPROPER SELECTION OR IMPROPER USE OF THE PRODUCTS DESCRIBED HEREIN OR RELATED ITEMS CAN CAUSE DEATH, PERSONAL INJURY AND PROPERTY DAMAGE.

This document and other information from Parker-Hannifin Corporation, its subsidiaries and authorized distributors provide product or system options for further investigation by users having technical expertise.

The user, through its own analysis and testing, is solely responsible for making the final selection of the system and components and assuring that all performance, endurance, maintenance, safety and warning requirements of the application are met. The user must analyze all aspects of the application, follow applicable industry standards, and follow the information concerning the product in the current product catalog and in any other materials provided from Parker or its subsidiaries or authorized distributors.

To the extent that Parker or its subsidiaries or authorized distributors provide component or system options based upon data or specifications provided by the user, the user is responsible for determining that such data and specifications are suitable and sufficient for all applications and reasonably foreseeable uses of the components or systems.



Parker LORD  
**Engineered Materials Group**

111 LORD Drive  
Cary, NC 27511-7923  
USA

phone +1 877 ASK LORD (275 5673)

[www.lord.com](http://www.lord.com)