

## Air Quality Data Sheet

The composition given below is the composition of the product AS FORMULATED. Variations may occur on individual batches because of adjustments made during production.

**CHEMLOK 234B**

Product Density, LB/GAL      **9.00 lb/gal**  
 Non-Volatile by Weight      **25.65 %**  
 Non-Volatile by Volume      **21.18 %**  
 Volatile by Weight              **74.35 %**  
 Volatile by Volume              **78.82 %**

**Volatile Organic Compounds**

Grams VOC/Liter	<b>776.00 g/l</b>
Pounds VOC/Gallon	<b>6.48 lb/gal</b>

**Density of Organic Solvent Blend**

LB/GAL                      **8.21 lb/gal**

**HAP Content**

LB HAP/GAL Solid              **31.60**

Kg HAP/L Solid                 **3.80**

**Density of Solids**

LB/GAL                      **10.55 lb/gal**

LB HAP/LB Solid                **2.90**

Kg HAP/Kg Solid                **2.90**

C.A.S. Number	Solvent Description	HAP	Percent of Volatile		Formula Percent	
			by Weight	by Volume	by Weight	by Volume
1330-20-7	Xylene	X	52.85	62.17	39.29	49.00
79-01-6	Trichloroethylene	X	34.01	22.92	25.28	18.06
100-41-4	Ethyl benzene	X	12.47	14.21	9.27	11.20
108-88-3	Toluene	X	0.40	0.45	0.30	0.36
106-88-7	1,2-Dicyanobenzene	X	0.17	0.17	0.13	0.13
79-00-5	1,1,2-trichloroethane	X	0.04	0.02	0.03	0.02
Unknown	Stabilizers		0.03	0.02	0.03	0.02
7732-18-5	Water		0.03	0.03	0.02	0.02



# Chemlok® 234B Adhesive

## Description

LORD Chemlok® 234B adhesive is a general purpose covercoat adhesive designed for use over Chemlok 205 primer. This adhesive system will bond a wide variety of vulcanized or unvulcanized rubber compounds to primed metal or other rigid substrates. It is composed of a mixture of polymers, organic compounds and mineral fillers dissolved or dispersed in an organic solvent system.

Chemlok 234B adhesive will bond compounds based on natural rubber (NR), polyisoprene (IR), styrene-butadiene (SBR), polybutadiene (BR), polychloroprene (CR), nitrile (NBR), butyl (IIR) and chlorosulfonated polyethylene (CSM).

## Features and Benefits

**Versatile** – when used in combination with Chemlok 205 primer, bonds a variety of cured and uncured elastomer compounds, flexible enough to bond uncured to cured, or cured to cured rubbers with the same or different compositions.

**Easy to Apply** – applies easily by brush, dip, roll coat or spray methods.

## Application

**Surface Preparation** – Thoroughly clean metal surfaces prior to primer application. Remove protective oils, cutting oils and greases by solvent degreasing or alkaline cleaning. Remove rust, scale or oxide coatings by suitable chemical or mechanical cleaning methods.

### • Chemical Cleaning

Chemical treatments are readily adapted to automated metal treatment and adhesive application lines. Chemical treatments are also used on metal parts that would be distorted by blast cleaning or where tight tolerances must be maintained. Phosphating is a commonly used chemical treatment for steel, while conversion coatings are commonly used for aluminum.

### • Mechanical Cleaning

Grit blasting is the most widely used method of mechanical cleaning. However machining, grinding or wire brushing can be used. Use steel grit to blast clean steel, cast iron and other ferrous metals. Use aluminum oxide, sand or other nonferrous grit to blast clean stainless steel, aluminum, brass, zinc and other nonferrous metals.

## Typical Properties\*

Appearance	Black Liquid
Viscosity, cps @ 25°C (77°F) Brookfield LV Spindle 7, 30 rpm	450-900
Density	
kg/m <sup>3</sup>	1066.4-1102.4
(lb/gal)	(8.9-9.2)
Solids Content by Weight, %	23-26.5
Flash Point (Gela), °C (°F)	28 (83)
Solvents	Xylene, Trichloroethylene

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

**LORD**  
AskUsHow®

## LORD TECHNICAL DATA

For further detailed information on surface preparation of specific substrates, refer to Chemick Adhesives application guide. Handle clean metal surfaces with clean gloves to avoid contamination with skin oils.

Allow primer to thoroughly dry before applying Chemick 234B adhesive. For further details on the use of Chemick 205 primer, refer to the Chemick 205 primer data sheet.

**Mixing** – Thoroughly stir Chemick 234B adhesive before applying adhesive over primer. Agitate sufficiently during use to keep dispersed solids uniformly suspended.

If the application method requires dilution, use xylene or toluene as diluents. Xylene is the suggested diluent for spray application; toluene is suggested for dip or brush application.

**Applying** – Apply Chemick 234B adhesive by brush, dip, spray or any method that gives a uniform coating and avoids excessive runs or tears.

For optimum adhesion and environmental resistance, the dry film thickness of Chemick 234B adhesive should be 12.7-25.4 micron (0.5-1.0 mil). For bonding cured rubber, dry film thickness of 20.3-38.1 micron (0.8-1.5 mil) is normally used.

**Drying/Curing** – Allow the applied adhesive to dry until visual examination of the film has shown that all solvent has evaporated. This will take approximately 30-60 minutes at room temperature. Drying time can be shortened by either preheating the metal inserts or oven drying after application. Metal parts may be preheated to a maximum of 65°C (150°F) prior to adhesive application. For coated parts, moderate drying temperatures should be used, but temperatures as high as 149°C (300°F) may be used for very short periods of time. Maximum air flow at minimum temperatures will give the best results.

Dried films of Chemick 234B adhesive are non-tacky; therefore, coated parts can be piled into tote pans for subsequent processing. Wear clean gloves when handling coated parts and cover tote pans to prevent contamination by dirt, dust, grease, oil, etc. If coated parts are properly protected, long layover times between adhesive application and bonding usually have no adverse effect on the bond.

**Post-Vulcanization Bonding** – PV bonds are obtained when bondline temperature reaches 149-177°C (300-350°F) in 20-40 minutes. Maintain a 5-10% compression of the vulcanized rubber section during cure and cool down to ensure intimate contact at the rubber/metal interface. Assembly lubricants may be necessary depending on the molded assembly configuration. Napthenic assembly oils can be used if assembly without lubrication is not possible.

**Cleanup** – Use xylene or toluene for clean up.

## LORD TECHNICAL DATA

### Shelf Life/Storage

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

### Cautionary Information

Before using this or any LORD product, refer to the Material Safety Data Sheet (MSDS) 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 technical data sheet represent typical values as not all tests are run on each lot of material produced. For formalized product specifications for specific product and uses, contact the Customer Support Center.

Information provided herein is based upon tests believed to be reliable. In as much as LORD Corporation has no control over the manner in which others may use this information, it does not guarantee the results to be obtained. In addition, LORD Corporation 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.

Chemlok and "Ask Us How" are trademarks of LORD Corporation or one of its subsidiaries.

LORD provides valuable expertise in adhesives and coatings, vibration and motion control, and magnetically responsive technologies. Our people work in collaboration with our customers to help them increase the value of their products. Innovative and responsive in an ever-changing marketplace, we are focused on providing solutions for our customers worldwide... Ask Us How.

#### LORD Corporation

##### World Headquarters

111 Lord Drive  
Gary, NC 27511-7923  
USA

##### Customer Support Center (in United States & Canada)

+1 877 ASK LORD (275 5673)

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

For a listing of our worldwide locations, visit [LORD.com/locations](http://LORD.com/locations).

©2008 LORD Corporation (02 000117 Rev.0 10/08)

**LORD**  
AskUsHow™