



## ADHESIVES AND SEALANTS

### THIXON™ P-6-EF Solvent Based Adhesive

#### Primary Use:

Thixon P-6-EF is a vulcanizing metal primer which can be used with all Thixon covercoat adhesives. Thixon P-6-EF is formulated without reportable levels of lead (or other heavy metals), chlorinated solvents and ozone-depleting chemicals.

Thixon P-6-EF will bond various metals including hot and cold rolled steel, stainless steel alloys, brass, aluminum, and zinc plated metals. It can also be used for bonding rubber to fibers such as rayon, polyester, and nylon.

Thixon P-6-EF can be used as a one-coat adhesive for bonding high durometer natural rubber, styrene butadiene rubber, and chloroprene.

#### \*Typical Physical Properties:

Property		ASTM Method
Color	Gray	
Viscosity, #2 G.E. Zahn cup	47 seconds	D-1084-88-D
Non-volatile solids by weight	26%	D-2369 †
Volume solids	15.31%	
Spec. Gravity	0.95	D-1475
VOC content per gal	5.8 lbs	
Weight per Gal	7.9 lbs	D-1475
Flash Point (Seta)	60°F	
Cure temp range	250 to 450° F	
Shelf life unopened stored at 78°F	6 months	

† Modified to internal Rohm and Haas method

\*These properties are typical and are not to be used for specification purposes.

**Environmental Resistance:** Properly prepared bonds will resist heat, salt fog, oil, and water immersion.

#### Directions For Use: Preparing the Surfaces:

Properly preparing the metal surface is the most important factor in obtaining consistent, high quality bonds. First, remove contaminants by alkaline cleaning or solvent degreasing. Then, gritblast ferrous metal surfaces with #40 or #50 steel grit; gritblast nonferrous metals with silica sand or aluminum grit. Then solvent degrease the metal.

Metal surfaces can also be pretreated using iron or zinc phosphate, chromate conversion, and acid or alkaline cleaning procedures.

Keep the pretreatment solutions clean. Often, poor bonds can be traced to using contaminated pretreatment solutions. Follow the manufacturer's instructions carefully. **Change the cleaning solutions when they are contaminated.** Keep the cleaning solutions at the concentration and temperature specified. Likewise, keep the metal immersed for the length of time specified.

#### Mixing and Diluting:

Diluents – Toluene, xylene or a diluent blend made of 80% toluene, 20% MIBK.

First, thoroughly mix Thixon P-6-EF with a propeller-type agitator. If diluting, slowly add the diluent to the adhesive while mixing constantly. Otherwise, the polymer base may precipitate from solution.

Continue to mix Thixon P-6-EF while spraying or dipping to keep the dispersed solids from settling to the bottom of the tank. The lower the viscosity, the more the solids tend to settle.

#### Applying the Adhesive:

**Brush -** For brush applications, use Thixon P-6-EF undiluted. To obtain the required film thickness, brush on a heavy wet film without brushing excessively.

**Dip -** For dip applications, dilute 5 parts Thixon P-6-EF with 1 part diluent, to obtain a dry film thickness of 0.3 to 0.5 mil. Continued ...

Conventional Air Spray - For spray applications, dilute Thixon P-6-EF with diluent to obtain a viscosity of 18 to 21 seconds (#2 G.E. Zahn cup).

<u>Equipment:</u>	<u>Binks</u>	<u>DeVilbiss</u>
Gun Models	62 or 18	JGA 502, or MBC 510
Fluid Nozzles	63A - 0.040" 63B - 0.046" 63C - 0.052"	FX - 0.042" FF - 0.055"
Air Caps	63PB or 66SD	704 or 777

Pressure Tank - Pressure tanks must be equipped with an agitator and be ASME rated for industrial use.

Flow Rate - 300 to 350 cc per minute

Atomization Pressure - 30 to 60 psi

To clean your spray equipment, use one of the recommended diluents.

#### **Drying the Film:**

After applying the film of Thixon P-6-EF, thoroughly dry approximately 45 to 60 minutes at room temperature. At lower temperatures, dry longer. The drying time can be shortened by force drying, five minutes at 180°F. Do not dry at temperatures above 250°F.

#### **Theoretical Coverage:**

One gallon of Thixon P-6-EF applied at a dry film thickness of 0.3 mil will cover approximately 818 square feet.

#### **Dry Film Stability:**

Thixon P-6-EF has excellent dry film stability. Inserts which have been coated with Thixon

P-6-EF can be stored for several weeks, if protected from contaminants.

**Molding and Curing:** Thixon P-6-EF can be used with all common molding and curing methods. Use a cure temperature between 212 and 400°F.

**Oven prebaking:** The adhesive-coated inserts can be prebaked for up to 5 minutes at 325°F without affecting the bond quality. Dried films of Thixon P-6-EF show no tendency to sweep during transfer and injection molding.

#### **Toxicity and Safety Information:**

**Read the Material Safety Data Sheet before using this material.** Toxicity and safety information is included on MSDS.

Various raw materials used in this product formulation may contain non-reportable levels of some heavy metals. Additionally, minimal amounts of lead may be present in this product due to the manufacture of other products at our facility. Therefore, a typical analysis of this product may detect nominal quantities of lead

#### **Storage & Handling Information**

**Read the Material Safety Data Sheet, Section 7, for the safe handling and storage of the product.** Store in a cool, dry, well-ventilated area away from heat, ignition sources and direct sunlight. Keep containers tightly closed. Containers should be supported and grounded before opening, dispensing, mixing, pouring and emptying.

For questions regarding the handling of empty containers or dry film with respect to the hazardous waste regulations, we suggest you contact the RCRA Hotline sponsored by US EPA at 1-800-424-9346 or your local/state environmental agencies.

**Note:** *Thixon P-6-EF was formerly known as Thixon D-21818.*

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