



## ADHESIVES AND SEALANTS

### THIXON™ 520-EF Solvent-Based Adhesive

#### Primary Use:

Thixon 520-EF is a covercoat adhesive used with Thixon adhesive primers for bonding NR, SBR, CR, IIR, and NBR compounds during vulcanization. Thixon 520-EF is formulated without reportable levels of lead (or other heavy metals), chlorinated solvents and ozone-depleting chemicals.

#### \*Typical Physical Properties as Manufactured:

Property		ASTM Method
Color	Black	
Viscosity, Brookfield #2 spindle at 30 RPM	135 cps	D-1084
Non-volatile solids By weight	27.5%	D-2369 †
Volume solids	15.89%	
Spec. Gravity	1.0	D-1475
VOC content per gal	6.107 lbs	
Weight per gal	8.3 lbs	D-1475
Flash Point (Seta)	82°F	
Suggested Film Thickness	0.3 to 0.5 mil	
Cure temp range	250 to 450°F	
Shelf Life at 78°F	2 years	

† 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 salt spray and water immersion.

#### Directions for Use:

##### Preparing the Surfaces:

Properly preparing the metal surfaces is the most important factor in obtaining consistent high quality bonds. First, remove contaminants by alkaline cleaning or solvent degreasing. Then, gritblast them with #40 or

#### Mixing and Diluting:

Dilutents: Use aromatic solvents, such as toluene or xylene as the diluent.

Thoroughly mix Thixon 520-EF with a high speed propeller-type agitator before use. If diluting, add the diluent to Thixon 520-EF while stirring continuously.

#### Applying the Adhesive:

Thixon 520-EF can be applied by brushing, dipping or spraying. Apply Thixon 520-EF at a dry film thickness of 0.5 to 1.0 mil.

Brush - For brush applications, apply Thixon 520-EF undiluted.

Dip - For dip applications, dilute 6 parts Thixon 520-EF with 1 part diluent.

Conventional Air Spray - Dilute 2 parts Thixon 520-EF with 1 part diluent to obtain a viscosity of 20 sec. # 2 G.E. Zahn cup.

Equipment:	Binks	DeVilbiss
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 Tanks - Pressure tanks must be equipped with an agitator and must be ASME rated for industrial use.

Flow Rate - 300 to 350 cc per minute

Atomization Pressure - 50 psi

To clean your equipment, use one of the listed dilutents.

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**Drying the Film:** Thoroughly dry the film of Thixon 520-EF, before continuing, approximately 30 minutes at 60° to 80°F. At lower temperatures, dry longer. Drying time can be shortened by force drying 5 minutes at 180°F. Dry at temperatures up to 250°F.

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

Thixon 520-EF has excellent dry film stability. Inserts coated with Thixon 520-EF can be stored for several months if protected from contaminants.

#### **Molding and Curing:**

Thixon 520-EF can be used with all common molding and curing techniques. Use a cure temperature from 250 and 450°F.

Thixon 520-EF shows no tendency to sweep during transfer and injection molding.

#### **Prebaking:**

The coated inserts can be prebaked up to 5 minutes at 320°F without affecting the bond quality.

#### **Theoretical Coverage:**

One gallon of Thixon 520-EF applied at a dry film thickness of 0.4 mil will cover approximately 637 square feet.

### **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 520-EF was formerly known as Thixon D-21842.*

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Visit us at <http://www.rohmhaas.com/adhesivesSealants>

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