



ADHESIVES AND SEALANTS

THIXON™ 305 Solvent Based Adhesive

Primary Use:

Thixon 305 is a solvent-based one-coat adhesive for bonding silicone compounds to metal during vulcanizing.

*Typical Physical Properties as manufactured:

| Property | | ASTM Method |
|--|------------------|---------------------|
| Color | Clear | |
| Viscosity, Zahn #1 | 27 seconds | D-1084-88-D |
| Viscosity, Brook-field #1 spindle at 100 RPM | 10 cps | D-1084 |
| Non-volatile solids by weight | 23% | D-1644-88, Method A |
| Spec. Gravity | 0.87 | D-1475 |
| Wgt per Gal | 7.3 lbs | D-1475 |
| Flash Point (Seta) | 40°F | |
| Cure temp range | 250° to 400°F | |
| Sugg. dry film thickness | 0.02 to 0.04 mil | |
| Shelf life at 78°F unopened | 18 months | |

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

Environmental Resistance

Properly prepared bonds will resist lubricating and transmission oil up to 300°F.

Directions for Use:

Preparing the Surfaces:

Properly preparing the surfaces is the most important factor is obtaining consistent, high quality bonds.

Remove contaminants by alkaline cleaning or solvent degreasing. Then, gritblast the metal surfaces with #40 or #50 grit, and solvent degrease them. Metal surfaces can also be pretreated with iron or zinc phosphate, chromate conversion, and acid etching procedures.

Keep the treatment solutions clean. Often, poor bonds are traced to using contaminated treatment solutions. Follow the manufacturer's treatment instructions carefully. **Change the cleaning solutions when they become contaminated.** Keep the cleaning solutions at the concentration and temperature specified. Likewise, keep the metal immersed for the length of time specified. **This product is moisture sensitive!** It will only tolerate approximately 0.1% of moisture. If product develops a cloudy appearance, **DO NOT USE !**

Mixing and Diluting:

Diluent - Use VM&P Naphtha or anhydrous methanol. Slowly add the diluent while mixing constantly.

Applying the Adhesive:

Thixon 305 can be applied by brushing, dipping, or spraying.

Brush - For brush applications, dilute 1 part Thixon 305 with 5 to 10 parts diluent, by volume, to achieve the required film thickness.

Dip - For dip applications, dilute 1 part Thixon 305 with up to 10 parts diluent.

Conventional Air Spray - For spray applications, dilute 1 part Thixon 305 with 5 parts diluent, by volume.

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

Flow Rate - 200 to 250 cc per minute

Atomization Pressure - 30 to 40 psi

Dying Thixon 305:

First, dilute Thixon 305 for use. Stir in the required amount of dye, and blend well. Thixon 305 is now ready for use.

| | |
|---------------------------|------------|
| <u>Diluted Thixon 305</u> | <u>Dye</u> |
| 1 Pint..... | 0.3 grams |
| 1 gallon | 2 grams |
| 5 gallons | 10 grams |
| 55 gallons | 110 grams |

Drying the Film:

Thoroughly dry the film of Thixon 305 before continuing, approximately 20 to 30 minutes at room temperature (60°-80°). At lower temperatures, dry longer. The drying time can be shortened by force drying 5 minutes at 180°F, but do not dry at temperatures above 250°F.

Dry Film Stability:

Thixon 305 has good dry film stability. Inserts coated with Thixon 305 can be stored for several days before use, if protected from contaminants.

Molding and Curing:

Thixon 305 can be used with all common molding and curing methods. Cure at temperatures between 250° and 400°F.

Thixon 305 films show no tendency to sweep during transfer and injection molding.

Prebaking:

The coated inserts can be prebaked up to 10 minutes at 320°F during mold loading without affecting bond quality.

Toxicity and Safety Information

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

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.

THIXON is a registered trademark of Rohm and Haas Company

These suggestions and data are based on information we believe to be reliable. They are offered in good faith, but without guarantee, as conditions and method of use of our products are beyond our control. We recommend that the prospective user determine the suitability of our materials and suggestions before adopting them on a commercial scale.

Suggestions for uses of our products or the inclusion of descriptive material from patents and the citation of specific patents in this publication should not be understood as recommending the use of our products in violation of any patent or as permission or license to use any patents of the Rohm and Haas Company.

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

Rohm and Haas Company, 10 South Electric Street, West Alexandria, OH 45381; Phone: 800-348-8846 FAX: 937-839-1343