THIXON™ 403/404

Description
THIXON™ 403/404 is a two-component adhesive primer used as a one-coat adhesive for bonding castable polyurethane and thermoplastic polyurethane at low temperatures. THIXON™ 403/404 can also be used with THIXON™ 405, 423 or 412/415 cover-coat adhesives. THIXON™ 403/404 bonds substrates such as metal, wood, nylon, particle board, plastics, epoxy, cement, sintered metals and alloys.

Benefits & Features
A good 2-component primer for polyurethane bonding applications, which works well with either THIXON™ 405 or THIXON™ 423 bonding systems.

Elastomer
Castable Polyurethanes and thermoplastic urethanes.

Substrate
CRS, Phosphate or grit blast pre-treated CRS, Aluminum, Stainless Steel, fiberglass, polyester, nylon, rayon fibers, etc.

Surface Prep
Review Dow’s rubber-to-substrate bonding agent application guide or contact your account manager.

Mix Instructions
Diluent - Use THIXON™ 907 as the diluent or a blend of 5 parts glycol ether acetate, 4 parts MEK, and 1 part toluene.

First, thoroughly mix THIXON™ 405 with a high speed propeller-type agitator. If diluting, slowly add the diluents to the adhesive while mixing constantly. Otherwise, the polymer base may precipitate from solution.

Continue to mix THIXON™ 405 while spraying or dipping to keep the dispersed solids from settling to the bottom. This will assure that a homogenous mixture of the adhesive is applied.

Application Technique
Brushing: use undiluted. Brush on a heavy wet film without excessively brushing. For most industrial applications, apply two coats.

Dipping: dilute 3 parts product with 1 part diluent, by volume. This will give a viscosity of 28 to 32 sec. #2 G.E. Zahn cup.

Spraying: dilute 3 parts product with 2 parts diluent, by volume. This will give a viscosity of 22 to 26 seconds #2 G.E. Zahn cup.

Drying the Film
The drying time is 30-50 minutes at room temperature.

Molding and Curing
Can be used with all common molding and curing methods. Cure temperatures between 87°C and 177°C (190°F and 350°F) are recommended.

Pre-Bake Resistance
Adhesive-coated inserts can be in ventilated forced air convection ovens for up to 3 hours at 212°F (100°C) before casting without affecting the bond quality. If prebaking longer than 3 hours at 212°F (100°C), coat the film of THIXON™ 403/404 with a one-coat adhesive such as THIXON™ 405.

Dry Film Stability
Excellent dry film stability. Inserts coated with product can be stored for several weeks if protected from contaminants.

Clean-up
Equipment clean up should be done using recommended dilution solvents.

Packaging/Sizes Available
Drums, pails and cans.

Storage & Stability
The shelf life of this material is assured for 6 months (from the date of manufacture) at temperatures below 78°F in an unopened container.

Toxicity and Safety Information
Read the Safety Data Sheet before using this material. Toxicity and safety information is included in the SDS.

Food Contact Applications
Dow Automotive products are not approved for direct or indirect food contact or drinking water applications. If your applications include food contact or drinking water requirements, please contact your Dow representative. For more information on the regulatory status of this product, please refer to the SDS for this product.
Notes

These are typical properties only and are not to be construed as specifications. Users should confirm results by their own tests.
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Published: 2015-05-14

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