



Limiting Oxygen Exposure to Dymax Activators

Dymax activator-cured adhesives are used successfully for producing quality components used in automobiles, pumps, tools, etc. To ensure Dymax activators are used correctly and with complete confidence, please make certain that Dymax activators are used and stored in accordance with the following information.

Over exposure to oxygen will cause Dymax activators to experience reduced reactivity with a resulting slowing of the fixture rate. To minimize oxygen exposure, pressurize application equipment with an inert gas such as nitrogen. Where an inert atmosphere is impractical, expose a minimum volume of activator to air. Activator should only be stored in metal containers, never plastic. Plastic “breathes” and allows oxygen to contact the activator.

Dymax activators vary in color naturally from straw to dark amber. Oxygen exposure during use will eventually cause the activators to darken in color. Activators that have darkened substantially after usage has commenced should have their performance verified.

Activator performance can be measured by conducting a glass slide fixture test using the following procedures:

- Using glass microscope slides, apply a thin film of activator to the end of one slide, covering about 1.00 inch.
- Apply a small bead of adhesive (do not spread) to the end of another glass slide. The bead size should be approximately 0.0625 (1/16”) of an inch.
- Join the adhesive and activator ends of the slides. Overlap the ends by 0.750 to 1.00 inch and squeeze the adhesive to a thin bond line. Press together for 5 seconds.
- Every 5 seconds, attempt to gently move the end of one slide relative to the other. Fixture time is when the slides resist movement with light finger pressure.

NOTE: If the fixture is out of specification per the Dymax product data sheet, repeat the test with a fresh lot of activator.

Good manufacturing processes including practicing a first-in, first-out inventory rotation will help ensure fresh material on the production line.

As the activator ages, a decrease in fixture and cure speed will be experienced. Other factors such bond line gaps, adhesive chosen, manufacturing environment, and the application technique and/or process can also affect the speed of fixture and should be explored as well.

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