

UV-Adhesive Simpl-Sealant®



Clear, UV-cured adhesive is why Simpl-Seal can offer:

- 1] Simplicity
- 2] Any Sealing Speed
- 3] Sustainability
- 4] Flexibility
- 5] Energy Efficiency
- 6] Labor Options
- 7] Profitability

It is the sealing versatility of UV-adhesive (Simpl-Sealant) that offers these benefits, choices and options.

Simpl-Sealant costs about \$70/bottle. When sealing average packages and using metered application, reported usage is 6,000-25,000 package seals/bottle... quarter-cent to one-cent per seal.

Direct cost offsets for Simpl-Sealant include reduced energy consumption and no tooling to purchase (or maintain or store). The value for these measurable savings often exceeds \$10,000 per package-style, per year.

A frequently asked question... *Is the adhesive sticky or hard to handle?*

THE ADHESIVE IS NOT STICKY OR HARD-TO-HANDLE.

Simpl-Sealant is not like library paste or instant glue. It does not "air cure." It stays wet until exposed to focused UV light (the Simpl-Seal UV-tunnel). When exposed to UV, Simpl-Sealant is catalyzed into a solid, invisible, plastic bond.

Because Simpl-Sealant is intended to bond surfaces of a closed package, the adhesive is between the surfaces. Should handling of the package be required after closing but before bonding (rare), the very small amount of adhesive is trapped between layers of packaging material. Barely a chance to be messy.

Spills are rare, but Simpl-Sealant wipes up like most liquids. Remember, UV cures the adhesive, so a spill remains wet while being wiped up.

Note: Applicator refilling is not done often (each shift or every few days).

Why has Simpl-Seal been chosen for millions of seals each month?

- ✓ *"... increased efficiencies. ... able to take 3 days of the RF method production and compress it into 1 day with UV."*
- ✓ *"... able to do multiple clamshells on the same production line, as there is no tooling required."*
- ✓ *"When [we first learned about] the Simpl-Seal system, we thought it was too good to be true... we're thrilled with it!"*

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What are the alternatives to UV adhesive?

- Hot-adhesive (heating/cooling are catalysts) is one alternative.
- Pressure-adhesive (pressure catalyst) is another.
- Melting of the plastic is one more.

These are the most frequent alternatives. And, a mishap with any of these, during production, does not “wipe up like any liquid.” And, all adhesives have associated costs.

How is Simpl-Sealant made?

Simpl-Sealant is a proprietary blend of plastic components in liquid form and “UV initiators.” What the initiators do is convert the clear liquid into a clear solid after being exposed to UV light.

How is the UV-adhesive cured (to create a bond)?

The UV light in a Simpl-Seal® tunnel, is focused on closed, adhesive-applied packages that are being conveyed through the Simpl-Seal UV tunnel. When they emerge from the tunnel, they are invisibly, but securely sealed.

The adhesive is available for multiple plastic types including but not limited to PVC, PET, RPET, PET derivatives, PLA, PCR and polycarbonates. Testing of your packaging will identify the type of plastic and thus identify the blend of adhesive that is ideal.

Because the adhesive must “see” the UV light, one of the surfaces must be transparent.

One of the challenges made to Simpl-Seal is that every seal needs adhesive (and there is an associated cost). All packaging has a cost associated with each seal. With energy/pressure fusion, the cost is energy (electric bill), a press, tooling (conveys energy and pressure) and time (labor). With other adhesives, the cost is for the adhesive and the application of it. Testing of packaging will identify the cost-per-seal.

Sealing with Simpl-Seal and Simpl-Sealant offers:

- 1] Simplicity
- 2] Any Sealing Speed
- 3] Sustainability
- 4] Flexibility
- 5] Energy Efficiency
- 6] Labor Options and
- 7] Profitability

It is the adhesive’s sealing versatility that provides all these benefits, choices and options.