



## Frequently asked questions about Dyna-Prep, Dyna-SLICKSHIELD™ and Dyna-SLICK™

### Have these products been used in the die-cutting industry before?

Yes! Our products caught the attention of PRECO (<https://www.precolc.com/>) who began offering our products through a private label distribution agreement with them from 2017-2019. Starting in 2020 we discontinued selling through distributors but have continued to sell direct to some of the top die cutting machine and die manufacturers in the world.

### What's the shelf-life of Dyna-SLICKSHIELD?

The shelf life of any of our products is 1-year from purchase, provided:

- The container is stored in 55 – 70° F environment,
- The container is not exposed to sunlight; even through UV protected windows.
- The bottle hasn't been left open. Once the bottle has been opened, you should be vigilant about closing the cap when not using.

### What is the curing time for these coatings?

The simple answer is 1-2 hours. Variables that can slow down the cure time are:

- Temperature. If the room temps are below 60° F, this can slow down the cure somewhat.
- Humidity in the air. As mentioned earlier, the curing catalysts for Dyna-Tek coatings are oxygen molecules and moisture in those molecules. So, drier air can influence the final cure time. For example, you might see your same application methods that work great during warmer summer months but need a little more time in the drier winter months.

### What is the temperature resistance of Dyna-Tek's coatings?

- Dyna-SlickShield™ - 1000-1200° F.
- Dyna-SLICK™ - up to 800° F.

## **What is recommended for cleaning the dies before applying Dyna-SlickShield™?**

Ultimately, there isn't a coating formulated and sold that will perform the way it was intended if the surface preparation is not good. So, overlooking and taking the surface cleaning steps of your dies for granted will often lead to underwhelming results.

We'll start by telling you what not to use:

- Don't use petroleum-based solvents such as lacquer thinners or mineral spirits. These solvents will deposit oil-based residues in the pores of your dies which will interfere with Dyna-Tek's coatings being able to adhere to the surface/substrate.
- You can use acetone, denature alcohol or isopropyl alcohol (IPA) solvents, however because these solvents tend to flash-off quickly, they are not as effective for cleaning any impurities in the porosity of the substrate.

Cleaning solvents we have found to be very effective are either Tert-Butyl Acetate, aka TBAC, or Isopropyl Acetate. We lean towards TBAC for a couple reasons:

- VOC-exempt by the EPA. Suitable for use anywhere in the U.S.
- Slower flash-off (evaporation time), which makes it better for deeper cleaning of the substrate.
- Thoroughly vetted by the Army Research Laboratory in 2010. [Army Report](#)
- TBAC - Safety data documentation – [Dyna-Prep SDS](#)

You can purchase TBAC from a wide range of sources. We offer TBAC in 4-, 8-, 16- and 32-ounce containers.

## **What could cause inconsistent results?**

Any time you see inconsistent or "spotty" results, the culprit is invariably due to something on, or in the substrate that hasn't been cleaned/removed which results in the coating not performing well. That said, another possibility can be portions of the surface where there is more porosity, scratches or other surface flaws. For example, if you use a burgundy Scotch Brite pad to clean residue that was on the part before you coated it, the surface scratches/scoring are likely deeper than the coating's thickness. (Burgundy Scotch Brite pads are equivalent to 360 grit sandpaper). In this case, you are best served to sand these areas down lightly with 1000, and even 3000 grit media to reduce the height of the scratches.