

# Application Guide

## **-520 Nano-Ceramic Adhesion Promoter**

(suitable for extreme low & high temperature\* use)

The -520; is a high temperature/performance, single component, ambient cure.

The -520 gives added adhesion, for questionable surfaces, or high temperature use coatings

The -520 was chemically designed to: create a covalent bond to substrate materials, allow for simple application methods, being applied as a thin film coating resulting in high performance properties. Even so, surface cleanliness is still of the utmost importance.

The surface should be clean, dry and free from oils and other containments.

- On metal & alloy component surfaces it is always preferred to have a light blasted profile on the surface to aid in the coating's physical bond, if it is possible to do so.
  - The -520 covalently bonds well to all metal types, (i.e.; aluminum, titanium, stainless, metal oxides, epoxies and most plastics, coatings, etc.).
- On composite substrate surfaces it is also preferred to have a very light abraded profile on the surface to aid in the coatings physical bond, if it is possible to do so.

Gently mix or shake the -520 primer contents before applying: (i.e.; by hand is acceptable)

If spraying, a fine spay tip (0.08) or similar is best, apply at 2 to 3 microns (dry film thickness) maximum. **(more is not better).**

■ Same DFT applies to a wipe-on application. Wet a lint free application cloth, so that when lightly wiped over the substrate surface a very thin, 2-3 micron, wet film is left behind.

- If it appears to be too thick, with the same cloth re-wipe and spread the -520 primer over a broader surface area

- Topcoat within 3-5 minutes of application - sooner is better (wet-on-wet is ok) – allowing the topcoat to bond well.
  - Please note! (allow the 520 primer to flash off before applying High Gloss finishes, as the -520 primer tends to reduce the surface gloss if a wet-on-wet application is used).
- If the primer dries longer than 8 minutes before top-coating, re-apply the -520 as above, allowing the surface of the -520 to reopen-up again, to allow the topcoat to bond well.

The -520 primer may be applied directly to substrate surfaces where there concerns of proper adhesion, due to potential contamination, (i.e.; silicones, hard anodizing processes, etc.)

The -520 primer may also be used over any of other cured coatings, (tightly bonded), to achieve good intra-coat adhesion, for multi-color camo coatings or due to damage or similar.

As with any new material, always test application and finished properties on a low value test article or panel before working on valuable surfaces.

- \* “High Temperature” equates to “high performance, including exhaust temperatures”

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