

# MultiPrep 200

Copper Adhesion Promoter

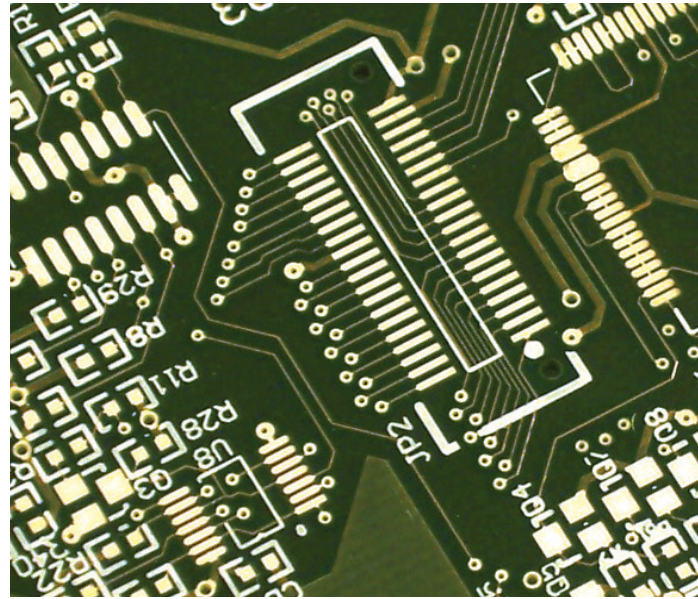
## Superior Bonding to Soldermask, Dry Film and Photoresist.

The **MultiPrep 200** adhesive promoter process creates an ideal surface for the adhesion of soldermask, dry film and liquid photo resist on copper. MultiPrep 200 eliminates the need for pumice and brush scrubbing, providing a uniform copper surface topography for unsurpassed bonding consistency.

MultiPrep 200 delivers a rough micro-roughened surface that is excellent for solder mask adhesion to microvias and ultra-fine features, as well as creating a strong, reliable bond between via fill and PTH copper.

The MultiPrep 200 chemistry provides an optimized copper surface roughening that is perfect for soldermask application. In addition, it is compatible with all final finish chemistries, including ENIG, silver, OSP and immersion tin.

Choose MultiPrep 200 for unparalleled copper adhesion to all organic thermal fills, coatings and films.



## KEY FEATURES

- Easily controllable process with a long bath life
- Creates a high adhesion microetch topography
- Provides an exceptionally uniform appearance



**MacDermid Enthone**

CIRCUITRY SOLUTIONS

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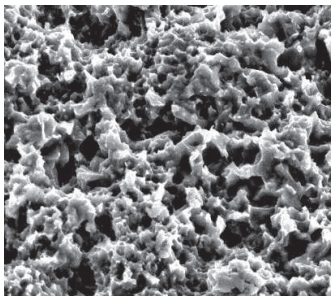
Copper Adhesion Promoter

## Customized Micro Roughening Process That Delivers Superior Soldermask and Photoresist Adhesion

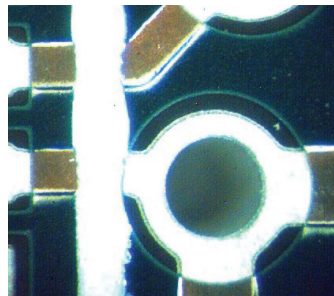
MultiPrep 200 results from decades of MacDermid Enthone experience with etching copper for optimized compatibility with our many other processes. When you use MultiPrep 200, you can be assured that our processes will perform reliably and durably, resulting in approval at all levels of the supply chain.

Delivering a rough, microetched surface that is ideal for microvias and ultra-fine structures on complex circuit boards, MultiPrep 200 is perfect for with all surface finishes, and provides ultimate uniformity and clean, continuous cosmetics.

### MultiPrep 200

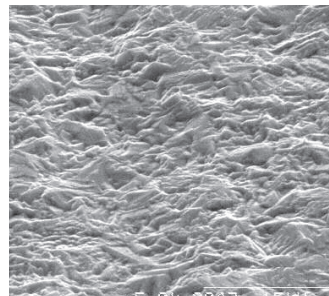


SEM at 5K x,  
Zygo results: Ra=0.58  $\mu\text{m}$   
Rz=5.2 $\mu\text{m}$

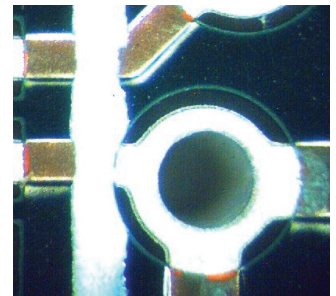


Uniform rough topography  
for bonding solder mask  
and photoresist (perfect  
tape-test adhesion even  
after immersion tin)

### Traditional Microetch



SEM at 5K x,  
Zygo results: Ra=0.03  $\mu\text{m}$   
Rz=0.36 $\mu\text{m}$



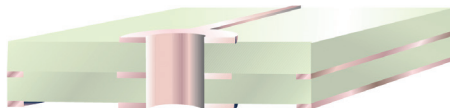
Solder mask lifting in tape  
test after immersion tin  
exposure

### Various MultiPrep 200 Applications

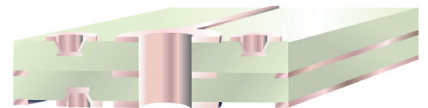
Preclean for dryfilm and liquid photoresist



Microetch for solder mask



Roughen microvias for resin plugging



[macdermidalpha.com](http://macdermidalpha.com)

MacDermid Enthone is a product brand of MacDermid Alpha Electronics Solutions.

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