

TCP-HF - RoHS Compliant Chemfilm Coating

RoHS (Reduction of Hazardous Substances)

TCP-HF is certified to meet or exceed requirements for the ELV, RoHS, WEEE directives.

TCP-HF meets or exceeds corrosion requirements of MIL Std., MIL DTL 81706, and MIL C5541 for class 1A and 3.

Metalast TCP-HF Background

TCP-HF is a trivalent based coating aimed at replacing Hexavalent Chromates. Hexavalent Chromates have been banned in the automotive world as a carcinogen, and all other industries are quickly following suit.

Department of Defense, United States Navy developed and tested

TCP-HF was developed and patented by the Department of Defense, U.S. Navy after existing coating replacements failed to qualify for Navy use due to high cost and inferior performance.

TCP-HF Performance

TCP-HF outperforms all other trivalent products tested by a magnitude of two to three times the corrosion protection, coating durability, paint and adhesive bonding, and, at a cost comparable to hexavalent chromates.

The product was developed for use on aluminum but has been tested and proven effective on a variety of metals including zinc, zinc alloy, and cadmium. TCP-HF is user friendly, applies at room temperature with no odor and a pH close to neutral.

TCP-HF Field Testing

The Navy tested the product on entire airframes of the F/A-18 as well as on the tail sections of the S-3. The aircraft were flown for an extended period with excellent long-term results.

The product has also been tested and approved for use on the Exterior framework of the United States Army Amphibious assault vehicle being manufactured by General Dynamics at GDDS Virginia.

TCP-HF Comparison

Of twenty competitive products tested by dozens of independent companies, TCP-HF outperformed all competitors by nearly twice the neutral salt spray corrosion testing.