



## PERFORMANCE TECHNICAL REPORT

**Subject:** Welding Tips/Tooling Release Coating  
**Date:** December 2001  
**Author:** David Burton, R&D Engineer

HPC S04-G is a durable fluoropolymer coating with good chemical resistance and outstanding nonstick properties. S04-G is completely color stable at elevated temperatures, and may be post formed. S04-G is used in a variety of applications for the production of consumer goods due the coating's long lasting release properties, while operating continuously at elevated temperatures.

S04-G has been used for extending the life of welding tips and shields that cover the tips from welding slag. Fort Knox Company manufactures safes for commercial and personal use. They found the life expectancy of a coated tip to be 2 to 3 times longer than that of an uncoated tip.



### Product Specifications

<b>Dry Film Thickness:</b>	0.6 to 0.8 mils (0.01524 to 0.02032 mm) per coat layer
<b>Tensile Strength:</b>	2,000 to 4,000 psi
<b>Elongation:</b>	35 to 50%
<b>Service Temperature:</b>	500°F (260°C) Continuous 600°F (316°C) Intermittent
<b>Pencil Hardness:</b>	H to 2H
<b>Dielectric Strength:</b>	1,200 to 2,000 V/mil
<b>Corrosion Resistance Salt Spray:</b>	500+ hours in accordance with ASTM B 117

For more information please visit our website at [www.hpcoatings.com](http://www.hpcoatings.com) or call our technical support department toll free at 1(800)456-4721.