Chemical Fume Suppressants Approved for Use at Specific Surface Tensions

Chemical Fume Suppressant and manufacturer	Chrome Plating Applications	Stalagmometer Measured Surface Tension (dynes/centimeter)	Tensiometer Measured Surface Tension (dynes/centimeter)
Benchbrite CR 1800 Benchmark Products ¹	All	< 40	< 35
Clepo Chrome MacDermid ¹	All	< 40	< 35
Fumetrol 140 Atotech, U.S.A. ¹	All	< 40	< 35
HCA – 6.2 Hunter Chemical LLC ¹	All	< 32	< 28
HCA-4 Hunter Chemical LLC ¹	All	< 32	< 28
Fumetrol 21 LF2 Atotech, U.S.A ²	Hard plating	≤ 30	≤ 27
Dicolloy CRPF ProCom LLC ²	Decorative plating and chromic acid anodizing	≤ 32	≤ 29
HCA - 8.4 Hunter Chemical LLC ²	Decorative plating and chromic acid anodizing	<u><</u> 25	<u><</u> 22
HCA - 8.4 Hunter Chemical LLC ²	Hard plating	<u>≤</u> 33	≤ 30
Macuplex STR NPFX MacDermid Enthone Industrial Solutions ²	Decorative plating and chromic acid anodizing	≤ 32	≤ 30

^{1.} These products contain PFOS. After September 21, 2016, these products can no longer be added to chrome plating tanks.

^{2.} These products do not contain PFOS and comply with the United States Environmental Protection Agency's National Emission Standards for Hazardous Air Pollutants – Hard and Decorative Chromium Electroplating and Chromium Anodizing Tanks (40 C.F.R. Part 63, Subpart N (commencing with 63.340), 77 Fed. Reg. 58219 (September 19, 2012)).

^{*}Table last updated September 21, 2016