

Wetting Agent 100

Fume suppressant



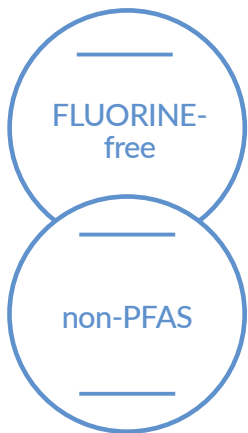
General Metal Finishing

Decorative coatings

atotech.com



A sustainable fume suppressant for decorative hexavalent chrome plating



Non-PFOS, non-PFAS, and fluorine-free fume suppressant for decorative chrome plating

Wetting Agent 100 is a non-PFOS, non-PFAS, and fluorine-free fume suppressant for hexavalent decorative chrome plating. The highly effective fume-suppressing process is based on surface-active components. It is designed to form a dense foam barrier layer that prevents the exhaust of hazardous aerosols. The standard emissions for this new fume suppressant are compliant with local regulations.

The fume suppressant provides an excellent balance between a controlled foam blanket and the reduction of surface tension to values below 42 (32 - 42) mN/m. It has a wide working window and consists of two fluorine-free products, Wetting Agent 100 A, which acts as a foam generator, and Wetting Agent 100 B, acting as a foam controller, which allows for more thorough control of the foam blanket and for the formation of a dense foam layer on the bath surface to achieve full coverage and help eliminate mist. The process is strongly resistant to hard water and outstandingly tolerates metal impurities. It is also easy to control, handle, and operate.

Maximum flexibility and protection



Image 1:
Wetting Agent 100 foam blanket on bath surface of chrome plating bath

Protecting the plating peripherals and reducing chemistry consumption

Effectively reducing the surface tension and covering the bath surface with the foam barrier prevents aerosols from being emitted into the air and reduces Cr(VI) contamination into the air extraction system. Reduced Cr(VI) emissions lead to decreased chemical drag-out into the rinses and lower chemical consumption.

TriChrome® process family – the more sustainable alternative to Cr(VI) plating

Due to their reduced HES concerns and offering non-Cr(VI), non-PFAS, and non-PFOS alternatives, TriChrome processes are the long-term solution to decorative hexavalent chromium electroplating showing environmental benefits and many other advantages. TriChrome processes have been used worldwide for more than 40 years in a variety of applications and are today a true alternative to Cr(VI).

Features and benefits

- Non-PFOS, non-PFAS, and non-fluorine-based process
- Complies with EPA, CEPA, and REACH regulations
- Reduces chromic acid misting during operation
- Controllable dense foam blanket thickness and surface tension
- Has passed the NESHAP stack test
- Lowers the chance of contamination of adjacent plating solutions by chromic acid fumes
- Increases the lifespan of ventilation systems and other plating line equipment
- Possesses strong resistance to hard water

