

TRITON™ HW-1000 Surfactant

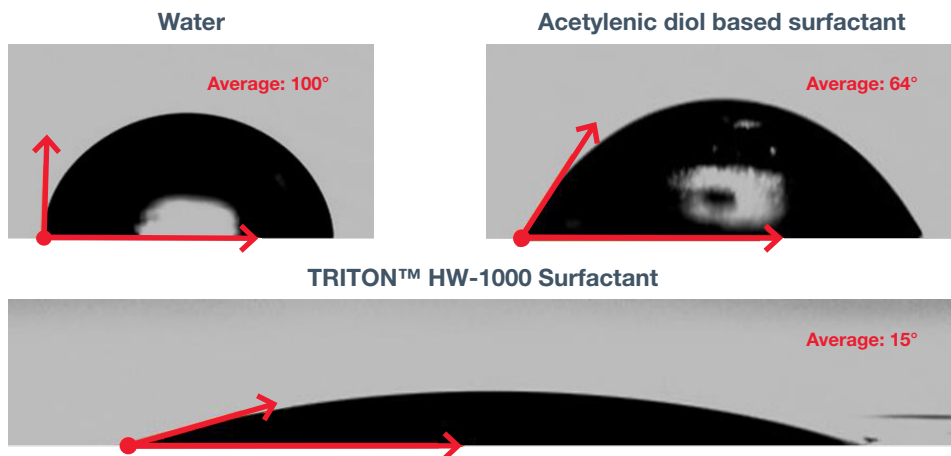
High wetting, low foam additive for industrial coatings

TRITON™ HW-1000 Surfactant is a high performing wetting agent for industrial waterborne coatings. It exhibits excellent surface tension reduction, improved handling and lower foam compared to acetylenic diol based surfactants. Dow's product does not contain added solvents and is inherently biodegradable as well as free of alkylphenol ethoxylates (APE), helping to reduce the environmental impact of the coating formulation.

Key features	Benefits
Excellent wetting and fast dynamic surface tension reduction	<ul style="list-style-type: none"> Enhances flow and leveling Enables fewer defects in coatings Improves water and chemical resistance
Low and readily dispersible foam	<ul style="list-style-type: none"> Increases production efficiency
Low pour point	<ul style="list-style-type: none"> Easy handling
No added solvents (100.0% active ingredient), APE-free and inherently biodegradable	<ul style="list-style-type: none"> Helps reduce the environmental impact of a coating formulation
Requires less dosage than common wetting agents	<ul style="list-style-type: none"> Decreases product necessary to deliver desired result

Surface wetting and foam performance of TRITON™ HW-1000 Surfactant vs. acetylenic diol based surfactant

TRITON™ HW-1000 Surfactant exhibits lower equilibrium surface tension, faster wetting and improved dynamic surface tension reduction in comparison to acetylenic diol based surfactants. Dow's surfactant migrates faster to the substrate to additionally enable better leveling.



Surfactant	Equilibrium surface tension (dynes/cm) (0.10% active, 25°C)	Dynamic surface tension (dynes/cm) (0.10% active, 22°C)			Draves wetting (sec) (0.10% active)	Ross-Miles (mm) (0.10% active, 25°C)	
		Bubble frequency				Initial	5 min.
		1 Hz	6 Hz	10 Hz			
TMDD*	32.8	n/a***	n/a	n/a	75	0	0
TMDD-1.3EO	32.9	33.5	35.0	35.8	240	0	0
TMDD-3.5EO	33.1	n/a	n/a	n/a	17	0	0
TMDDD**-(EO)n	25.9	26.1	29.5	33.9	1	15	5
TRITON™ HW-1000 Surfactant	25.8	26.5	30.9	34.3	< 1	15	5

These are typical properties, not to be construed as specifications.

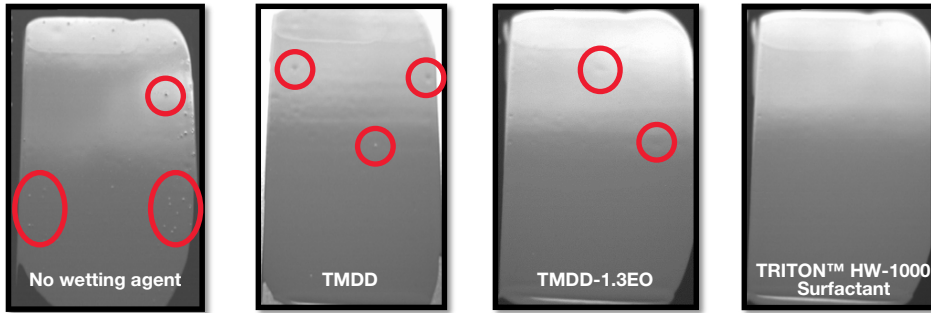
*TMDD: 2,4,7,9-tetramethyl-5-decyne-4,7-diol

**TMDDD: 2,5,8,11-tetramethyl-6-dodecyne-5,8-diol

***n/a: Not measured

Improved appearance of high solids industrial metal coatings

TRITON™ HW-1000 Surfactant delivers enhanced appearance compared to other high quality wetting additives. The images below show 7 mil wet drawdown of an AVANSE™ MV-100 Acrylic Resin system on aluminum substrate with 0.2 wt% wetting agent. This high solids system shows no defects in the TRITON™ HW-1000 Surfactant formulation.



Note: Red circles highlight the coating defects (craters, orange peel and bad leveling).

The graphic representations are presented here for illustrative purposes only and should not be construed as product specifications.

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