

CARE SPECIALITIES

# ZUSOTEC WA 110 AND ZUSOTEC WA 310

New high-performing low-foaming  
wetting agents



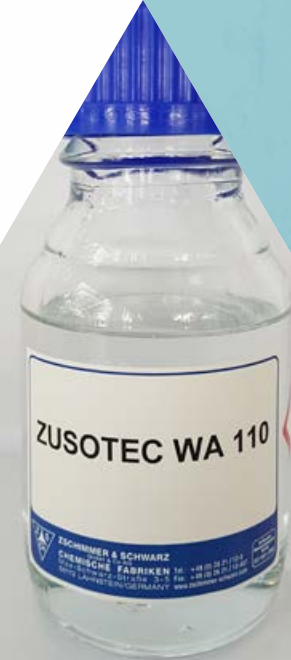
ZSCHIMMER & SCHWARZ

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New high-performing low-foaming  
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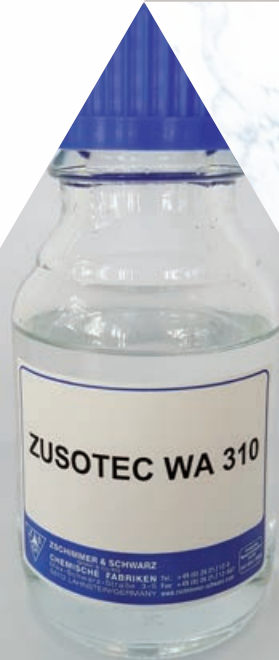
## PRODUCT CHARACTERISTICS:

- ▶ Nonionic surfactants
- ▶ 100 % active matter
- ▶ Stable in alkaline and acidic solutions
- ▶ Readily biodegradable



## ZUSOTEC WA 110

For low concentrated cleaners  
( $\leq 0.05$  % wetting agent)



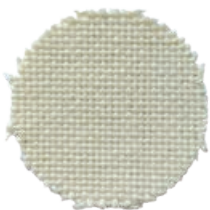
## ZUSOTEC WA 310

For highly concentrated cleaners  
( $\geq 0.1$  % wetting agent)

## WETTING PROPERTIES:

Both products were tested not only according to DIN EN 1772 (cotton wetting test) in distilled water, but also - practically far more relevant - in cleaner solutions. Tested cleaners are an “Alkaline spray cleaner” and a “Low-foam alkaline cleaner”.

Benchmark for the tests in both formulations is **PROPETAL 105**, a nonionic all-purpose wetting agent. The foam volume of the tested formulations was measured via DIN EN 12728.



### Test principle DIN EN 1772

- ▶ Immersion of a cotton piece in a solution
- ▶ wetting agents will lead to the wetting of the cotton piece and cause sinking

### Test principle DIN EN 12728

- ▶ Foam creation via beating disc
- ▶ 30 beats in 30 seconds

## ALKALINE SPRAY CLEANER

### Original formulation

Water	88.0 %
CUBLEN® D 5012	2.0 %
Caustic soda	1.0 %
PROPETAL 220	3.0 %
<b>PROPETAL 105</b>	<b>2.0 %</b>
SULFETAL 4105	4.0 %

### Modified with ZUSOTEC WA 110

Water	88.0 %
CUBLEN® D 5012	2.0 %
Caustic soda	1.0 %
PROPETAL 220	3.0 %
<b>ZUSOTEC WA 110</b>	<b>2.0 %</b>
SULFETAL 4105	4.0 %

### TESTING CONDITIONS:

Dosage: 1.5 % formulation in tap water

Concentration: 0.03 % of the wetting agent in dilution

Temperature: 20°C

Measurement method	Original formulation	With ZUSOTEC WA 110
Wetting time (derived from DIN EN 1772)	26 seconds	<b>19 seconds</b>
Foam volume after 30 seconds (derived from DIN EN 12728)	30 ml	<b>30 ml</b>

## LOW-FOAMING ALKALINE CLEANER

### Original formulation

Water	86.5 %
Caustic soda	4.0 %
Trisodium citrate	4.0 %
<b>PROPETAL 105</b>	<b>2.0 %</b>
AMPHOTENSID EH	3.5 %

### Modified with ZUSOTEC WA 310

Water	86.5 %
Caustic soda	4.0 %
Trisodium citrate	4.0 %
<b>ZUSOTEC WA 310</b>	<b>2.0 %</b>
AMPHOTENSID EH	3.5 %

### TESTING CONDITIONS:

Dosage: 5 % formulation in tap water

Concentration: 0.1 % of the wetting agent in dilution

Temperature: 20°C

Measurement method	Original formulation	With ZUSOTEC WA 310
Wetting time (derived from DIN EN 1772)	17 seconds	<b>12 seconds</b>
Foam volume after 30 seconds (derived from DIN EN 12728)	30 ml	<b>120 ml</b>

Both new products improve the wetting time significantly and still offer low foam volume.



**Chemistry tailor-made**

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